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Monthly Energy Review

Office of Energy Information and Analysis,
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National Energy
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Editor: Judy Gaynor
Publications Coordinator: Elizabeth A. Snyder
Editorial Review: Patricia M. Jacobus
Graphics Review: Office of Communications and Public Affairs

Overview: Judy Gaynor
Crude Petroleum and Products: Frank E. Lalley, Ginger Roccapriore, Katherine E. Seiferlein
Natural Gas Liquids, Natural Gas: James W. McCarrick
Coal: Patricia Newman
Electric Utilities: Thomas Murphy
Cooling Degree-Days: Michael J. Maloney
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Petroleum Consumption Forecast: Joan Heinkel
Resource Development: Judy Gaynor
Price: Christopher B. Bordeaux, Les Byers, William Davis, William Gillespie, Annie Whatley
International: Elizabeth K. Bauer

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Correspondence regarding editorial matters should be addressed to:

Editor, Monthly Energy Review
National Energy Information Center
Federal Energy Administration
Washington, D.C. 20461

Feature articles appearing in previous issues:

Contents

Part 1 Overview

During June, for the fourth month in a row, production of energy in the United States exceeded the level for the corresponding month of a year ago. June production averaged 172 trillion Btu per day (the equivalent of 30 million barrels per day of crude oil), 3.8 percent greater than in May and 2.4 percent greater than in June 1976. The bulk of the increase was attributed to the startup of new coal production in the West and the commencement of crude oil flow from the North Slope through the Alaska pipeline. Average daily coal production rose 7.1 percent from the May level, and crude oil output increased by 4.8 percent. Estimated natural gas production was also higher in June (an increase of 0.2 percent on a daily average basis) as was nuclear electric power generation (up 6.0 percent). Average daily energy production for the first half of 1977 was 0.5 percent greater than the rate for the first half of 1976, signaling a possible reversal of the 4-year downtrend in domestic energy output.

Imports of fossil fuels remained high in June, averaging 54 trillion Btu per day (or 9.3 million barrels per day of crude oil equivalent), 16.6 percent above the June 1976 level. During the first 6 months of 1977 imports were 30.2 percent greater than the comparable 1976 level. The largest increase was reported for crude oil imports (up 38.7 percent). Refined petroleum product imports were 15.7 percent higher and natural gas imports were up 6.9 percent.

The large growth in crude oil and refined product imports demonstrates the Nation's increasing dependence on petroleum to meet its energy needs. In the first 5 months of 1977, 48.1 percent of the energy consumed in the United States was petroleum products compared with 45.7 percent in the first 5 months of 1973, prior to the oil embargo. Dependence on coal increased slightly, from 16.9 percent in January-May 1973 to 18.0 percent during the same period this year. Natural gas consumption, on the other hand, declined sharply relative to the other fuels, from 32.2 percent of the 1973 5-month consumption total to 27.3 percent this year. The combined share of nuclear and hydroelectric power rose from 5.2 percent of the national energy requirement to 6.6 percent.

Stocks of crude oil and most of the major refined products continued to grow during June, largely as a consequence of the strong importing activity. Crude oil stocks closed the month at 339 million barrels, 20.3 percent above the June 1976 level. Refined product stocks exhibited the following buildups compared with the June 1976 levels: motor gasoline, +12.4 percent; jet fuel, +3.5 percent; distillate fuel oil, +9.5 percent; and residual fuel oil, +7.5 percent. The volume of working gas* in underground natural gas storage reservoirs at the end of June was 6.1 percent above the June 1976 level.

Electric utilities produced 5.3 percent more power during the first 6 months of 1977 than during the similar period of 1976. Preliminary weekly data indicate that there will be a substantial production increase in July to accommodate the additional air-conditioning requirements resulting from abnormally hot weather. Cooling degree-days for July were 16 percent above normal and 19 percent above the number accumulated in July 1976.

Retail prices for all grades of motor gasoline increased seasonally in June by about 0.5 cent per gallon. Average prices during the month were as follows: full service regular, 63.4 cents per gallon; self service regular, 59.3 cents per gallon; full service premium, 68.9 cents per gallon; and full service unleaded, 67.2 cents per gallon.

Total world crude oil production fell to 58.8 million barrels per day in May from 60.6 million in April. A pipeline fire and accident in Saudi Arabia reduced OPEC production by 1.4 million barrels per day to 30.6 million. Cumulative world production for the year is running about 9 percent ahead of production during the comparable period a year ago.

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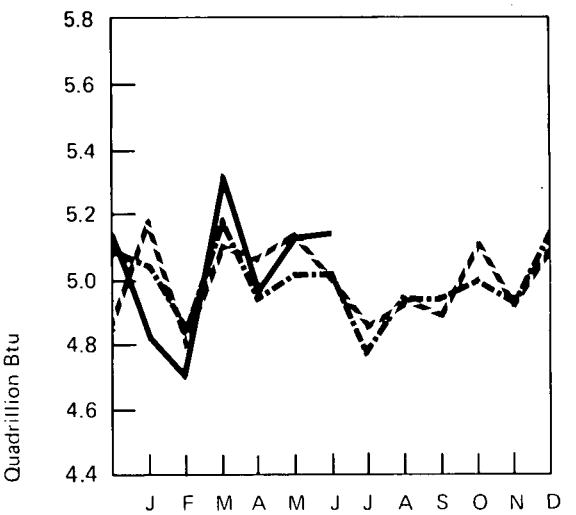
*Gas available for withdrawal.

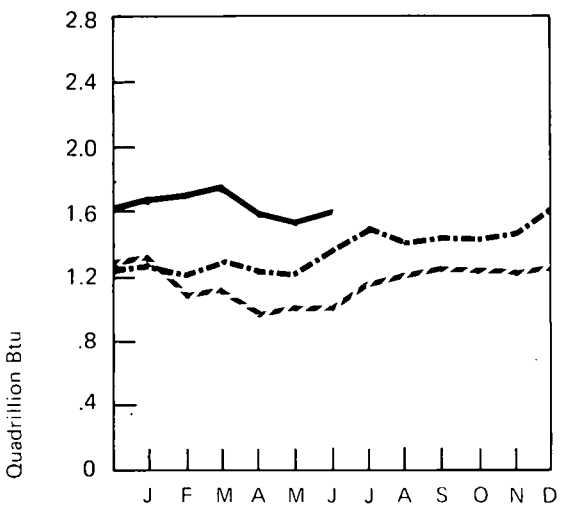
		Domestic Production of Energy*	Imports of Fossil Fuels**	Domestic Consumption of Energy***
		Quadrillion (10^{15}) Btu		
1972	TOTAL	62.937	11.563	71.895
1973	TOTAL	62.373	14.519	74.551
1974	TOTAL	61.138	14.114	72.601
1975	January	5.199	1.334	6.927
	February	4.793	1.093	6.054
	March	5.118	1.128	6.267
	April	5.060	0.971	5.685
	May	5.148	1.030	5.368
	June	4.999	1.027	5.315
	July	4.849	1.164	5.550
	August	4.942	1.220	5.634
	September	4.896	1.272	5.388
	October	5.118	1.232	5.801
	November	4.918	1.210	5.747
	December	5.095	1.255	6.821
	TOTAL	60.134	13.935	70.557
1976	January	5.056	1.296	R7.173
	February	4.834	1.210	R6.247
	March	5.194	1.301	R6.252
	April	4.937	1.245	R5.731
	May	5.034	1.232	R5.655
	June	5.035	1.391	R5.692
	July	4.777	1.507	R5.883
	August	4.952	1.416	R5.824
	September	4.949	1.465	R5.602
	October	5.005	1.448	R6.103
	November	4.916	1.498	R6.585
	December	5.141	1.610	R7.493
	TOTAL	59.830	16.619	R74.242
1977	January	4.819	R1.700	R7.704
	February	4.690	R1.718	R6.520
	March	R5.322	R1.783	R6.390
	April	R†4.947	R†1.581	R†5.836
	May	R†5.130	R†1.535	††5.778
	June	†5.155	†1.622	NA
	TOTAL	30.064 (6 months)	9.939 (6 months)	32.228 (5 months)

*See Explanatory Note 1.
**See Explanatory Note 2.
***See Explanatory Note 3.
†Preliminary data.
††Partially estimated.
R=Revised data.
NA=Not available.
Source: FEA.

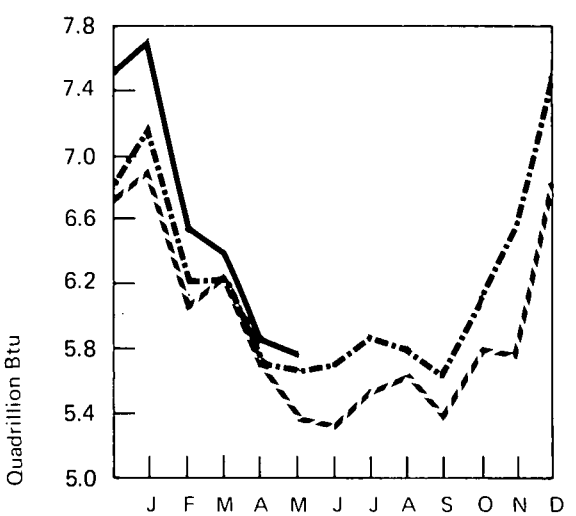
Domestic Production of Energy



Imports of Fossil Fuels



Domestic Consumption of Energy



Part 2

Crude Oil and Refined Petroleum Products

Crude Oil and Refined Petroleum Products

Domestic crude oil production in June is preliminarily estimated at 8.3 million barrels per day, 4.8 percent higher than the production rate in May and 1.5 percent higher than the production rate in June 1976. This production increase reflects both the commencement of crude oil flow from the North Slope through the Alaska pipeline and a production increase in South Louisiana of 120,000 barrels per day. It is the first month since February 1973 that domestic production has increased from its previous year's level.

Total petroleum imports (crude oil and refined products) continued high in June 1977 averaging 8.8 million barrels per day, 17.7 percent above the June 1976 level. Crude oil imports averaged 6.9 million barrels per day, 23.6 percent above last June's level.

Gasoline demand in June is estimated at 7.4 million barrels per day, 0.7 percent below the record level set in June 1976. Residual oil demand in June is estimated at 2.9 million barrels per day, 16.9 percent greater than the June 1976 level. The increased demand is being accommodated by a corresponding increase in domestic production of residual oil.

Crude Oil

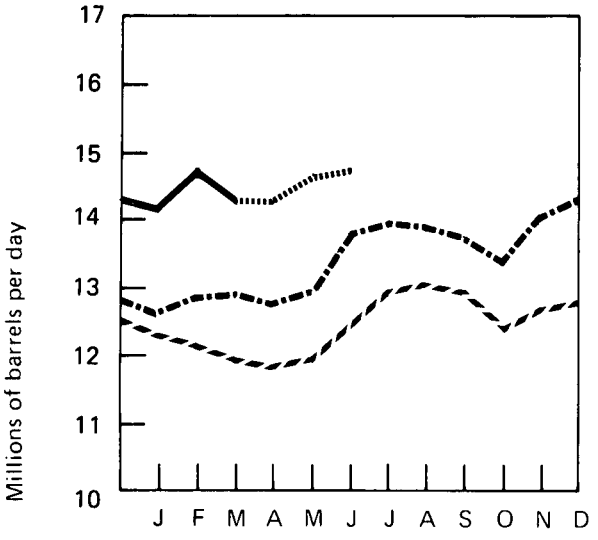
		Crude Input to Refineries	Domestic Production*	Imports*	Stocks*
		Thousands of barrels per day			Thousands of barrels
1972	**AVERAGE**	**11,696**	**9,441**	**2,216**	****246,395**
1973	**AVERAGE**	**12,431**	**9,208**	**3,244**	****242,478**
1974	**AVERAGE**	**12,133**	**8,774**	**3,477**	****265,020**
1975	January	12,297	8,455	4,029	R270,462
	February	12,135	8,591	3,828	276,755
	March	11,905	8,493	3,656	279,989
	Aprii	11,803	8,457	3,378	281,908
	May	11,983	8,379	3,486	280,961
	June	12,417	8,421	3,905	276,132
	July	12,915	8,336	4,192	264,157
	August	13,046	8,249	4,581	256,616
	September	12,945	8,280	4,689	259,446
	October	12,365	8,324	4,389	269,584
	November	12,689	8,278	4,623	270,950
	December	12,779	8,254	4,476	271,354
	AVERAGE	**12,442**	**8,375**	**4,105**	
1976	January	12,560	8,211	4,595	289,296
	February	12,834	8,196	4,208	277,414
	March	12,877	8,175	4,738	283,112
	April	12,727	8,080	4,790	286,628
	May	12,920	8,168	4,669	283,982
	June	13,799	8,144	5,621	281,715
	July	13,901	8,104	5,792	282,599
	August	13,888	8,074	5,556	277,272
	September	13,716	8,185	5,875	284,357
	October	13,319	8,049	5,699	297,683
	November	14,101	8,043	5,946	298,836
	December	14,333	8,006	5,925	285,471
	AVERAGE	**13,416**	**8,119**	**5,287**	
1977	January	14,140	7,790	R6,288	294,037
	February	R14,740	8,067	R6,652	291,387
	March	R14,270	R8,022	R6,633	R299,464
	April	14,246	R7,934	R6,766	310,137
	May	R14,652	R7,887	R6,444	R318,217
	June	14,783	8,263	6,947	338,959
	AVERAGE (6 months)	**14,467**	**7,991**	**6,619**	

*See Definitions.
**Total as of December 31.

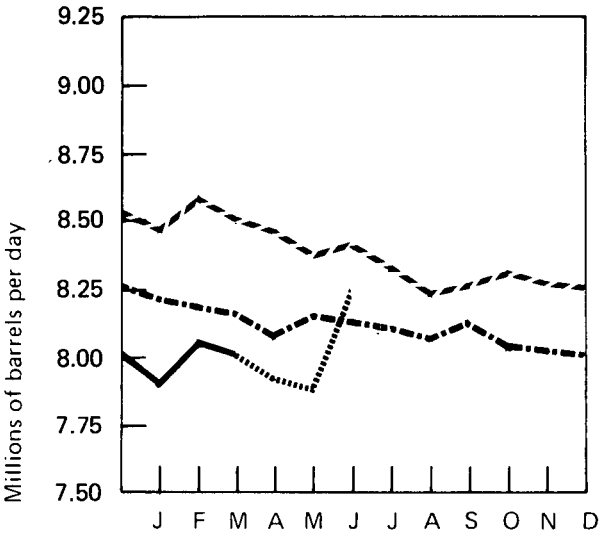
R=Revised data.

Sources: Bureau of Mines (BOM) *Mineral Industry Surveys,* "Petroleum Statement, Annual" and Petroleum Statement, Monthly" through March 1977; Federal Energy Administration (FEA) "Monthly Petroleum Statistics Report" for April and May 1977; June 1977 data are FEA estimates based on data from the American Petroleum Institute (API) "Weekly Statistical Bulletin."

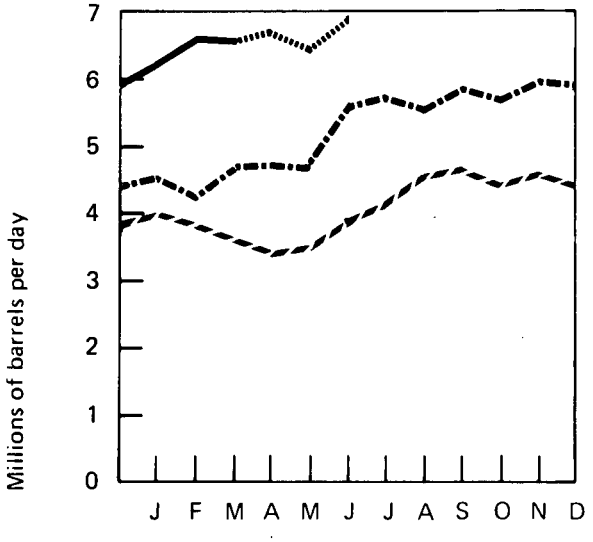
Crude Input to Refineries



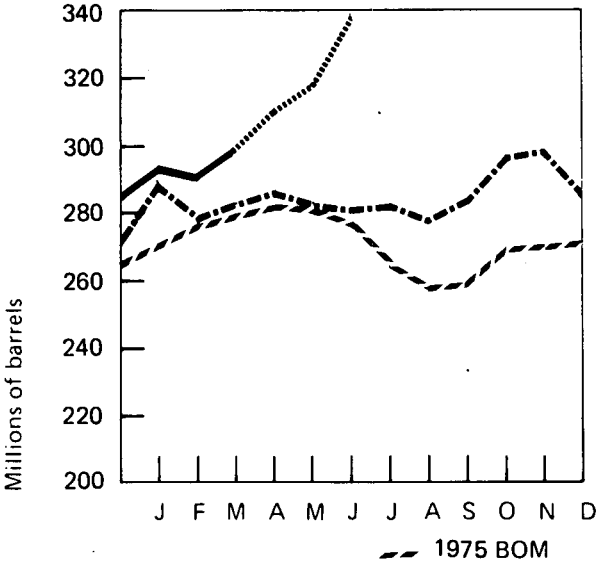
Domestic Production



Imports



Stocks



Total Refined Petroleum Products

		Domestic Demand	Imports*
		Thousands of barrels per day	
1972	**AVERAGE**	**16,367**	**2,525**
1973	**AVERAGE**	**17,308**	**3,012**
1974	**AVERAGE**	**16,653**	**2,635**
1975	January	18,004	2,832
	February	17,084	2,348
	March	16,315	2,074
	April	16,048	1,662
	May	15,155	1,728
	June	15,610	1,502
	July	15,740	1,767
	August	15,806	1,717
	September	15,768	2,115
	October	16,377	1,940
	November	15,777	1,796
	December	18,185	1,949
	AVERAGE	**16,322**	**1,951**
1976	January	18,599	2,070
	February	17,429	2,423
	March	17,299	1,946
	April	16,672	1,806
	May	15,977	1,654
	June	16,836	1,858
	July	16,613	2,098
	August	16,642	1,826
	September	16,825	2,038
	October	17,052	1,808
	November	18,847	2,114
	December	20,506	2,468
	AVERAGE	**17,443**	**2,007**
1977	January	R20,481	R2,595
	February	R20,427	R3,278
	March	R18,056	R2,611
	April	R17,545	R1,749
	May	R17,073	R1,557
	June	17,699	1,855
	AVERAGE (6 months)	**18,526**	**2,263**

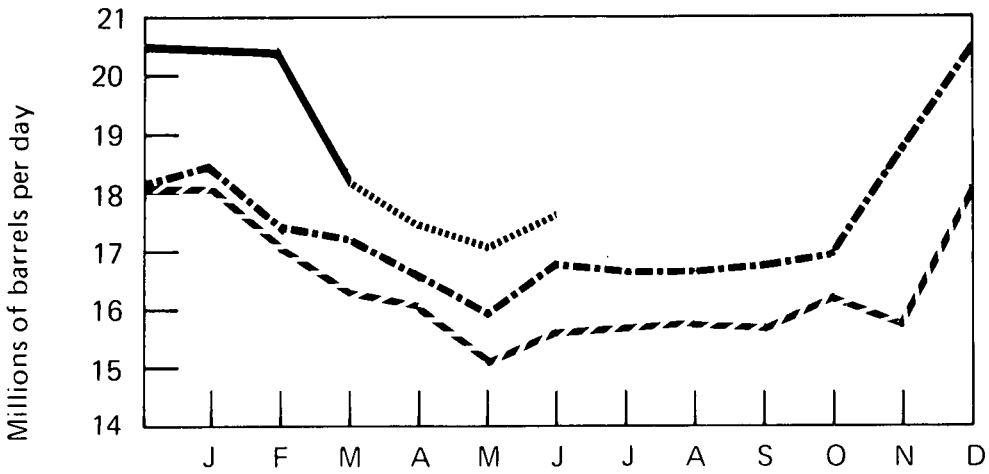
Total Petroleum Imports

(Crude Oil and Refined Products)

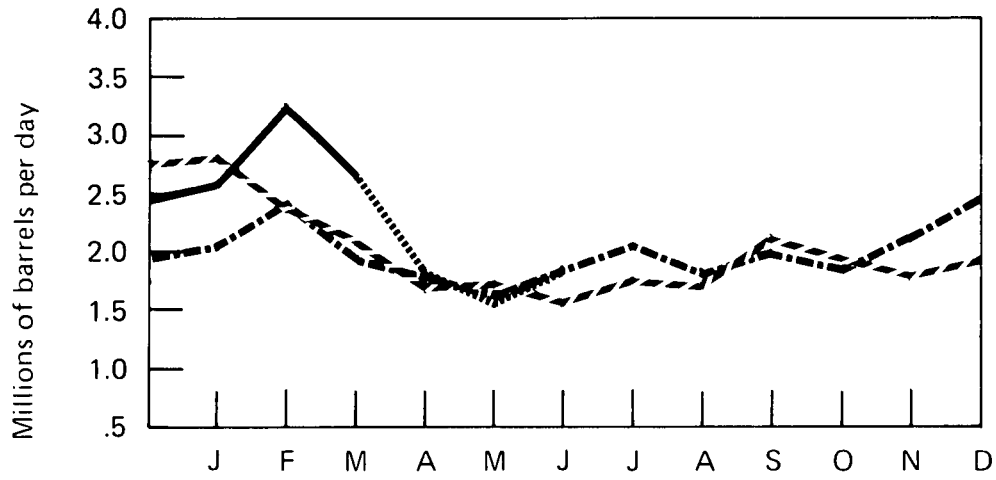
Thousands of barrels per day
4,741
6,256
6,112
6,861
6,176
5,730
5,040
5,214
5,407
5,959
6,298
6,804
6,329
6,419
6,425
6,056
6,665
6,631
6,684
6,596
6,323
7,479
7,890
7,382
7,913
7,507
8,060
8,393
7,294
R8,883
R9,930
R9,244
R8,515
R8,001
8,802
8,881

*See Definitions.
R=Revised data.
Sources: Bureau of Mines (BOM) *Mineral Industry Surveys,* "Petroleum Statement, Annual" and "Petroleum Statement, Monthly" through March 1977; Federal Energy Administration (FEA) "Monthly Petroleum Statistics Report" for April and May 1977; June 1977 data are FEA estimates based on data from the American Petroleum Institute (API) "Weekly Statistical Bulletin."

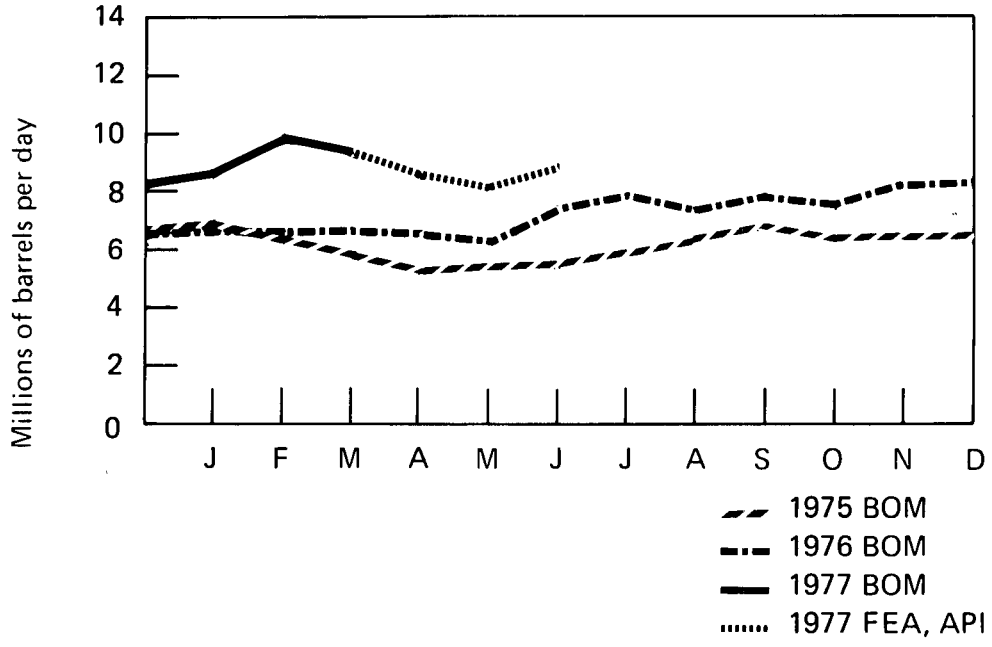
Total Refined Product Domestic Demand



Refined Product Imports



Total Petroleum Imports



Direct and Indirect* U.S. Petroleum Imports from OPEC Countries

	Algeria	Indonesia	Iran	Libya	Nigeria	Saudi Arabia	United Arab Emirates	Venezuela	Other OPEC**	Total OPEC	Arab Members of OPEC
						Thousands of barrels per day					
1973											
Direct	134.2	212.7	222.7	164.3	458.9	487.3	70.6	1,124.7	106.5	2,981.9	914.4
Indirect	17.0	25.0	211.0	144.0	149.0	253.0	13.0	509.0	88.0	1,409.0	463.0
Total	**151.2**	**237.7**	**433.7**	**308.3**	**607.9**	**740.3**	**83.6**	**1,633.7**	**194.5**	**4,390.9**	**1,377.4**
1974											
Direct	190.2	300.1	468.8	4.4	697.6	460.6	70.5	979.3	88.3	3,259.8	748.5
Indirect	16.9	40.8	262.2	35.9	214.6	214.6	17.3	478.5	128.7	1,409.5	357.9
Total	**207.1**	**340.9**	**731.0**	**40.3**	**912.2**	**675.2**	**87.8**	**1,457.8**	**217.0**	**4,669.3**	**1,106.4**
1975											
Direct											
January	280.1	293.9	394.1	18.7	882.3	847.6	46.9	1,016.1	130.6	3,910.3	1,267.0
February	239.4	318.7	297.1	82.2	846.1	794.5	105.9	763.2	135.5	3,582.6	1,260.3
March	295.8	286.4	180.6	174.7	835.5	637.4	113.2	722.2	168.7	3,414.5	1,281.8
April	225.9	351.1	345.9	124.9	618.7	427.6	70.4	823.9	61.6	3,050.0	853.1
May	345.4	358.7	225.5	211.4	643.5	335.2	124.7	801.3	159.1	3,204.8	1,041.2
June	346.8	480.9	231.5	182.9	619.1	500.5	77.3	711.3	130.7	3,281.0	1,131.1
July	346.6	463.4	217.4	248.0	714.9	587.7	107.2	679.0	115.6	3,479.8	1,301.7
August	268.8	472.4	203.4	407.0	804.1	748.5	259.5	521.8	90.5	3,776.0	1,718.0
September	284.1	410.0	276.7	456.6	817.0	730.7	216.1	624.4	145.1	3,960.7	1,701.7
October	235.6	402.2	310.7	236.3	772.5	961.1	93.3	514.9	109.2	3,634.8	1,575.4
November	295.7	396.9	472.9	275.6	801.7	933.9	69.1	584.7	72.2	3,902.7	1,585.0
December	211.0	390.6	186.2	354.6	784.9	1,074.7	114.2	622.1	130.1	3,868.4	1,777.7
Total Direct	281.5	388.4	280.4	232.0	761.5	715.0	116.7	697.6	116.1	3,589.2	1,381.3
Indirect	6.7	49.3	244.4	97.3	76.3	176.6	37.5	332.5	143.2	1,163.8	408.8
Total	**288.2**	**437.7**	**524.8**	**329.3**	**837.8**	**891.6**	**154.2**	**1,030.1**	**259.3**	**4,753.0**	**1,790.1**
1976											
Direct											
January	345.5	478.0	387.5	451.3	781.7	1,111.9	118.8	533.7	86.3	4,294.7	2,045.7
February	357.4	465.3	241.2	328.4	830.9	1,080.9	118.5	838.6	102.8	4,364.0	1,925.3
March	347.2	552.0	292.5	372.2	896.8	1,145.0	159.4	468.1	111.8	4,345.0	2,058.5
April	446.5	467.6	323.3	356.2	997.0	1,027.5	195.5	496.8	81.6	4,392.0	2,036.2
May	410.6	485.5	183.7	362.0	855.1	1,141.5	214.5	487.7	135.9	4,276.5	2,138.8
June	501.2	603.6	323.2	487.8	1,127.6	1,205.0	290.1	668.0	70.5	5,277.0	2,486.5
July	451.0	581.0	374.3	487.1	1,136.7	1,327.7	305.2	808.0	208.8	5,679.8	2,711.4
August	510.0	554.5	294.2	463.5	1,029.4	1,317.6	228.1	704.0	133.6	5,234.9	2,597.4
September	435.3	570.2	274.6	491.0	1,173.0	1,288.1	335.1	932.4	198.7	5,698.4	2,748.2
October	357.2	487.4	284.2	456.2	1,097.5	1,366.2	304.4	772.8	232.7	5,358.5	2,578.8
November	502.0	647.1	316.8	533.9	1,173.8	1,316.1	341.1	810.8	170.7	5,812.3	2,768.4
December	379.9	556.4	289.5	637.2	1,193.6	1,404.0	448.0	868.4	194.8	5,971.8	2,956.6
Total Direct	428.3	537.4	298.5	453.3	1,025.2	1,229.8	255.2	699.2	134.0	5,060.9	2,421.0
Indirect	10.0	32.0	248.0	76.0	94.0	136.0	68.0	273.0	82.0	1,019.0	352.0
TOTAL	**438.3**	**569.4**	**546.5**	**529.3**	**1,119.2**	**1,365.8**	**323.2**	**972.2**	**216.0**	**6,079.9**	**2,773.0**
1977											
Direct											
January	493.0	571.6	316.4	543.8	1,278.2	1,346.1	297.4	785.6	344.4	5,976.5	2,932.1
February	659.7	545.9	412.7	638.0	1,265.1	1,442.7	316.7	918.4	241.0	6,440.2	3,135.6
March	459.8	567.0	735.0	701.2	1,300.0	1,371.6	369.5	664.3	184.3	6,352.7	3,022.1
Total Direct	533.6	562.2	490.5	627.3	1,614.9	1,385.1	328.4	785.0	256.8	6,250.6	3,026.5
Indirect	18.8	99.2	332.3	159.8	146.2	204.9	102.3	278.5	129.6	1,471.6	583.0
TOTAL (3 months)	**552.4**	**661.4**	**822.8**	**787.1**	**1,761.1**	**1,590.0**	**430.7**	**1,063.5**	**386.4**	**7,722.2**	**3,609.5**

*Indirect imports refer to U.S. imports of petroleum products, primarily from Caribbean and European areas, that have been refined from crude oil produced in other areas. U.S. imports of these products have been prorated to each OPEC country of origin based on the share of total crude oil supply in the Caribbean and European areas which was imported from each OPEC country.
**Includes Ecuador, Gabon, Iraq, Kuwait, and Qatar.
Sources: Bureau of Mines *Mineral Industry Surveys,* "Petroleum Statement, Monthly;" "PAD Districts Supply/Demand, Monthly;" and FEA estimates.

U.S. Petroleum Imports from Non-OPEC Sources

	Bahamas	Canada	Netherlands Antilles	Puerto Rico	Trinidad and Tobago	Virgin Islands	Other	Total
				Thousands of barrels per day				
1973	**170.8**	**1,312.9**	**573.6**	**99.3**	**250.6**	**329.2**	**537.8**	**3,274.2**
1974	**159.3**	**1,067.6**	**509.6**	**90.4**	**241.2**	**391.7**	**392.6**	**2,852.4**
1975								
January	216.1	949.1	549.4	99.0	232.9	563.5	319.5	2,929.5
February	213.9	854.5	315.2	148.8	255.1	490.3	315.7	2,593.5
March	162.6	746.9	279.5	139.0	185.7	506.4	295.7	2,315.8
April	168.9	704.3	237.7	73.1	171.8	353.3	273.9	1,983.0
May	122.3	574.2	242.9	77.9	237.1	413.4	304.2	1,971.7
June	130.0	872.7	261.6	75.1	204.5	352.6	229.6	2,126.1
July	178.3	889.1	368.3	104.9	281.1	320.8	358.7	2,501.2
August	135.8	887.9	333.1	72.9	289.4	399.1	364.9	2,483.1
September	143.6	918.0	428.6	66.9	283.2	389.7	614.3	2,844.3
October	135.8	946.3	357.8	105.8	222.2	336.3	557.6	2,661.8
November	88.8	893.1	280.0	60.6	265.5	353.0	518.8	2,459.8
December	119.5	907.3	238.0	50.9	262.5	405.9	375.0	2,359.1
Total	**152.0**	**845.2**	**323.6**	**89.7**	**240.9**	**406.5**	**377.5**	**2,435.4**
1976								
January	134.1	681.7	291.7	71.0	343.2	468.4	380.2	2,370.3
February	127.6	644.9	262.4	122.2	326.3	462.3	321.7	2,267.4
March	90.4	590.2	328.7	114.0	315.6	424.5	475.5	2,338.9
April	131.9	578.4	274.9	68.5	291.9	341.2	516.5	2,203.3
May	95.2	614.9	214.1	70.6	257.5	388.5	405.7	2,046.5
June	104.2	653.3	190.4	54.3	319.3	427.5	453.0	2,202.0
July	112.8	581.7	259.1	77.9	279.2	386.5	513.4	2,210.6
August	98.5	580.9	268.7	81.5	163.6	437.2	516.6	2,147.0
September	143.1	564.8	273.3	104.1	182.6	408.5	537.9	2,214.3
October	78.3	562.0	239.0	92.2	215.2	460.5	502.0	2,149.2
November	140.4	561.8	267.6	104.1	254.3	454.4	465.3	2,247.9
December	141.5	578.3	400.3	98.5	324.2	408.4	470.5	2,421.3
Total	**116.5**	**599.3**	**274.6**	**88.1**	**272.6**	**422.3**	**460.6**	**2,234.0**
1977								
January	166.9	614.2	288.3	82.5	303.4	424.4	563.6	2,443.3
February	292.2	590.2	428.6	86.3	413.3	547.7	1,097.6	3,455.9
March	200.4	561.7	257.3	97.4	286.5	505.5	981.9	2,890.7
TOTAL (3 months)	**217.3**	**588.6**	**321.2**	**88.8**	**331.7**	**490.8**	**874.1**	**2,912.5**

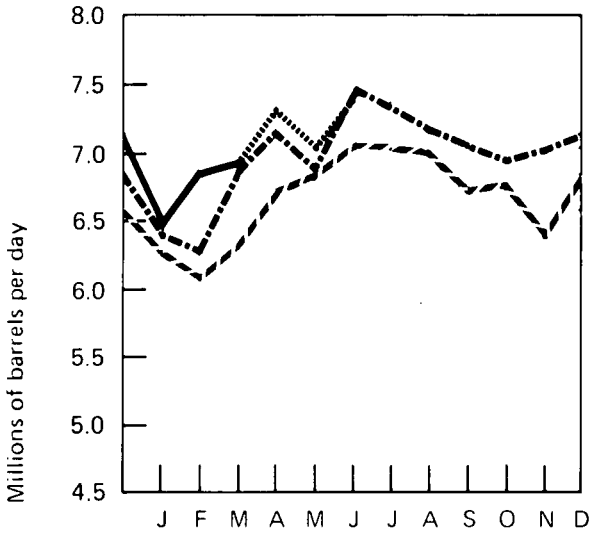
Source: Bureau of Mines *Mineral Industry Surveys,* "Petroleum Statement, Monthly" and "PAD Districts Supply/Demand, Monthly."

Motor Gasoline

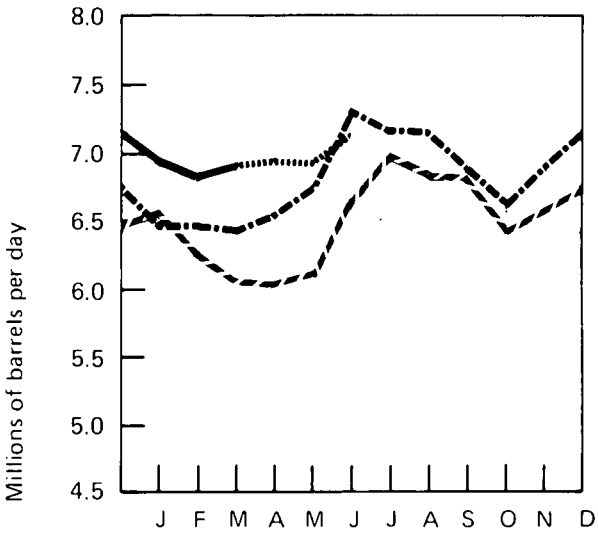
		Domestic Demand	Production*	Imports	Stocks*
		Thousands of barrels per day			Thousands of barrels
1972	**AVERAGE**	**6,376**	**6,281**	**68**	****212,770**
1973	**AVERAGE**	**6,674**	**6,527**	**134**	****209,395**
1974	**AVERAGE**	**6,537**	**6,358**	**204**	****218,346**
1975	January	6,206	6,509	262	***242,285
	February	6,096	6,276	171	251,915
	March	6,326	6,070	150	248,685
	April	6,718	6,046	133	232,556
	May	6,871	6,126	142	213,947
	June	7,076	6,669	177	207,114
	July	7,041	7,003	209	212,454
	August	7,008	6,872	232	215,480
	September	6,729	6,823	269	226,447
	October	6,778	6,410	207	221,493
	November	6,390	6,602	139	232,091
	December	6,808	6,786	119	234,925
	AVERAGE	**6,675**	**6,518**	**184**	
1976	January	6,398	6,483	92	240,464
	February	6,263	6,472	84	248,854
	March	6,890	6,455	123	239,049
	April	7,159	6,562	99	223,965
	May	6,853	6,774	112	225,037
	June	7,482	7,303	188	225,365
	July	7,315	7,174	190	226,922
	August	7,168	7,149	141	230,578
	September	7,079	6,878	171	229,751
	October	6,929	6,678	138	226,300
	November	7,038	6,938	146	227,742
	December	7,138	7,176	84	231,387
	AVERAGE	**6,978**	**6,837**	**131**	
1977	January	6,466	6,934	222	252,608
	February	6,897	6,817	184	255,519
	March	R6,936	R6,902	R245	R264,686
	April	R7,337	6,967	R233	R258,353
	May	R7,030	R6,950	R202	R262,066
	June	7,427	7,157	183	253,420
	AVERAGE (6 months)	**7,013**	**6,956**	**212**	

*See Definitions.
**Total as of December 31.
***Bureau of Mines' stock coverage was expanded at the end of 1974 to include an additional 100 bulk terminal operators; the new coverage begins here with January 1975.
R=Revised data.
Sources: Bureau of Mines (BOM) *Mineral Industry Surveys,* "Petroleum Statement, Annual" and "Petroleum Statement, Monthly" through March 1977; Federal Energy Administration (FEA) "Monthly Petroleum Statistics Report" for April and May 1977; June 1977 data are FEA estimates based on data from the American Petroleum Institute (API) "Weekly Statistical Bulletin."

Domestic Demand



Production



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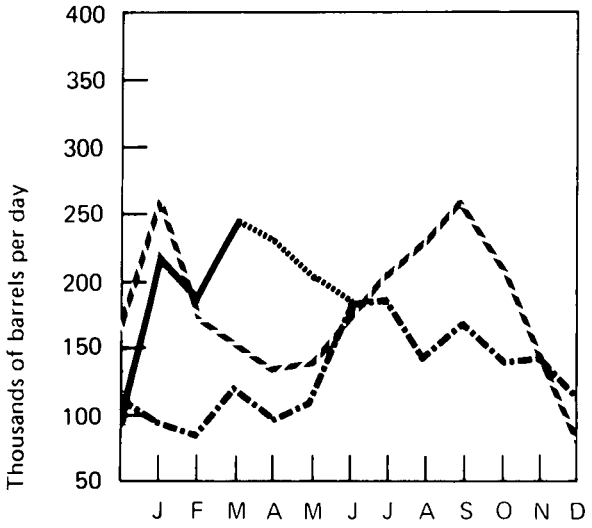
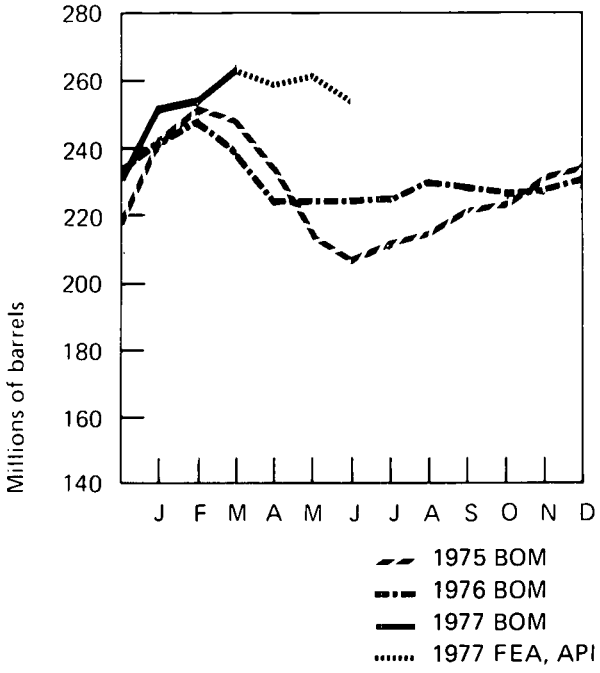


Stocks

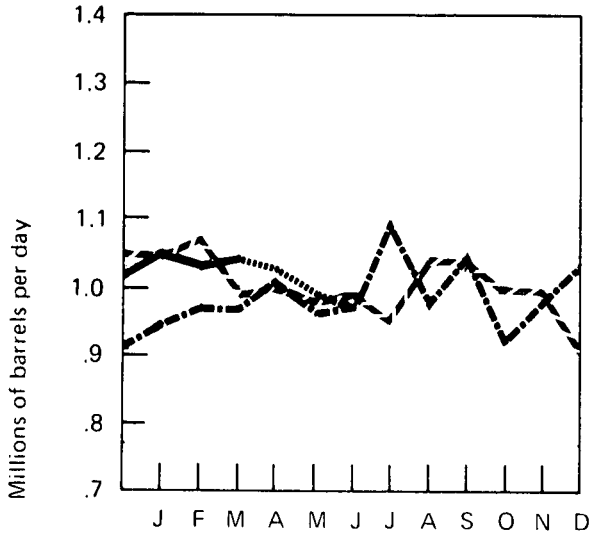


Jet Fuel

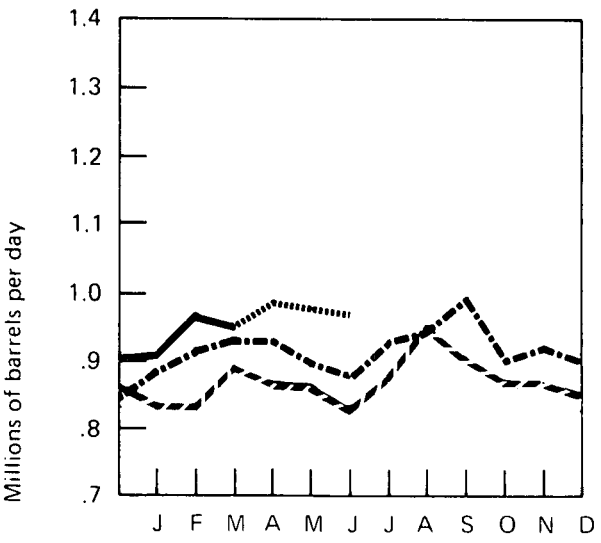
		Domestic Demand	Production	Imports	Stocks
		Thousands of barrels per day			Thousands of barrels
1972	**AVERAGE**	**1,045**	**847**	**194**	***25,493**
1973	**AVERAGE**	**1,059**	**859**	**212**	***28,544**
1974	**AVERAGE**	**993**	**836**	**163**	***29,435**
1975	January	1,041	831	229	**30,321
	February	1,075	835	200	29,133
	March	982	896	130	30,456
	April	1,006	864	137	30,263
	May	977	861	133	30,719
	June	989	839	106	29,337
	July	954	883	88	29,798
	August	1,046	958	132	31,103
	September	1,040	907	140	31,291
	October	997	864	106	30,410
	November	999	864	89	28,977
	December	911	849	109	30,380
	AVERAGE	**1,001**	**871**	**133**	
1976	January	948	889	69	30,618
	February	965	918	71	31,180
	March	965	927	86	32,619
	April	1,010	927	108	33,332
	May	960	899	106	34,664
	June	972	879	68	33,879
	July	1,099	933	130	32,732
	August	965	942	38	33,121
	September	1,048	990	63	33,204
	October	911	890	50	34,032
	November	978	920	56	33,859
	December	1,027	900	72	32,085
	AVERAGE	**987**	**918**	**76**	
1977	January	R1,054	917	R77	30,170
	February	1,036	974	74	30,455
	March	R1,041	954	R98	R30,739
	April	1,027	990	90	32,271
	May	R990	R979	R54	R33,537
	June	965	971	28	35,058
	AVERAGE (6 months)	**1,019**	**964**	**70**	

*Total as of December 31.
**Bureau of Mines' stock coverage was expanded at the end of 1974 to include an additional 100 bulk terminal operators; the new coverage begins here with January 1975.
R=Revised data.
Sources: Bureau of Mines (BOM) *Mineral Industry Surveys,* "Petroleum Statement, Annual" and "Petroleum Statement, Monthly" through March 1977; Federal Energy Administration (FEA) "Monthly Petroleum Statistics Report" for April and May 1977; June 1977 data are FEA estimates based on data from the American Petroleum Institute (API) "Weekly Statistical Bulletin."

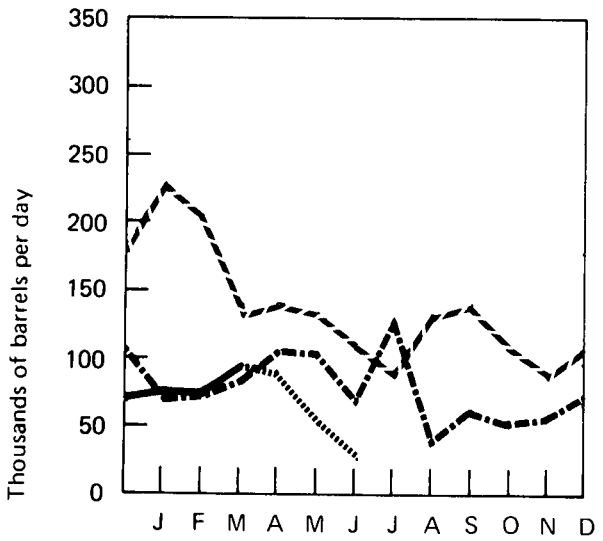
Domestic Demand



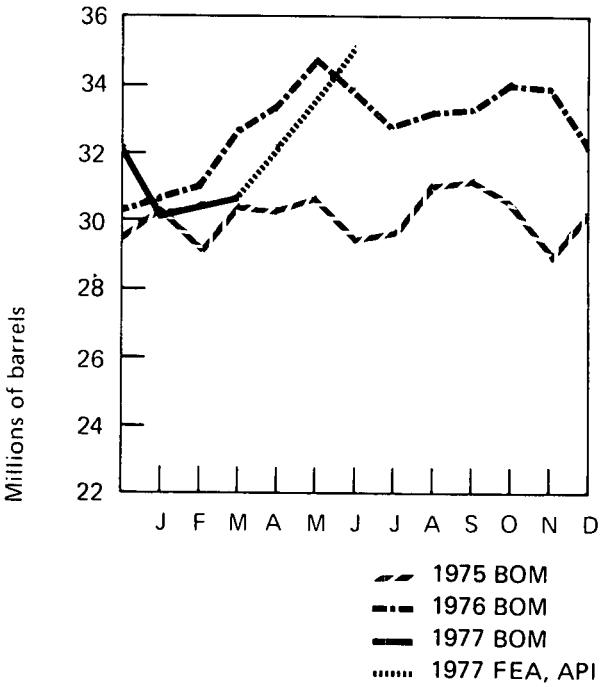
Production



Imports



Stocks

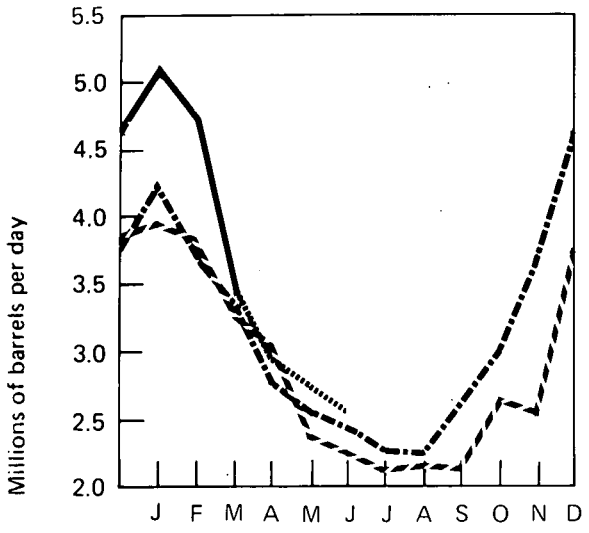


Distillate Fuel Oil

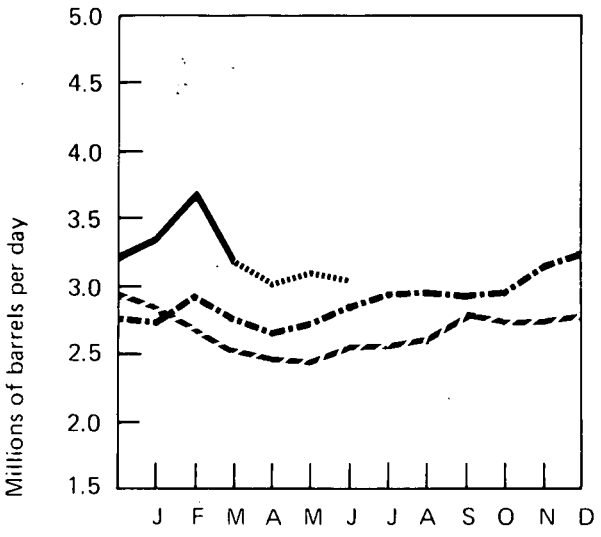
		Domestic Demand	Production*	Imports	Stocks*
		Thousands of barrels per day			Thousands of barrels
1972	**AVERAGE**	**2,913**	**2,630**	**182**	****154,284**
1973	**AVERAGE**	**3,092**	**2,820**	**392**	****196,421**
1974	**AVERAGE**	**2,948**	**2,668**	**289**	****200,029**
1975	January	3,963	2,852	334	*** 199,715
	February	3,803	2,679	302	176,696
	March	3,292	2,532	255	161,111
	April	3,094	2,487	110	146,214
	May	2,382	2,431	136	152,027
	June	2,267	2,574	69	163,306
	July	2,109	2,590	104	181,472
	August	2,173	2,592	92	197,323
	September	2,163	2,812	130	220,732
	October	2,677	2,745	104	226,113
	November	2,544	2,767	96	235,749
	December	3,792	2,783	138	208,787
	AVERAGE	**2,851**	**2,653**	**155**	
1976	January	4,298	2,734	164	165,428
	February	3,687	2,961	207	150,439
	March	3,336	2,793	151	138,306
	April	2,788	2,655	96	137,249
	May	2,519	2,738	97	147,057
	June	2,436	2,885	151	165,064
	July	2,255	2,959	126	190,861
	August	2,237	2,982	131	217,930
	September	2,618	2,947	147	232,230
	October	3,029	2,995	141	235,599
	November	3,714	3,181	135	223,648
	December	4,650	3,255	179	185,948
	AVERAGE	**3,130**	**2,924**	**144**	
1977	January	R5,111	3,375	R350	142,989
	February	R4,714	R3,702	R664	133,261
	March	R3,421	R3,179	R519	R141,882
	April	R2,978	3,021	R157	148,094
	May	R2,750	R3,118	R86	R162,123
	June	2,590	3,079	141	180,815
	AVERAGE (6 months)	**3,584**	**3,240**	**316**	

*See Definitions.
**Total as of December 31.
***Bureau of Mines' stock coverage was expanded at the end of 1974 to include an additional 100 bulk terminal operators; the new coverage begins here with January 1975.
R=Revised data.
Sources: Bureau of Mines (BOM) *Mineral Industry Surveys,* "Petroleum Statement, Annual" and "Petroleum Statement, Monthly" through March 1977; Federal Energy Administration (FEA) "Monthly Petroleum Statistics Report" for April and May 1977; June 1977 data are FEA estimates based on data from the American Petroleum Institute (API) "Weekly Statistical Bulletin."

Domestic Demand



Production



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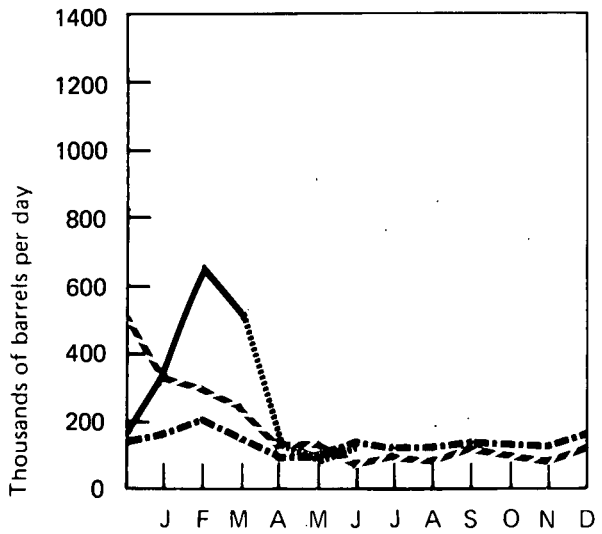
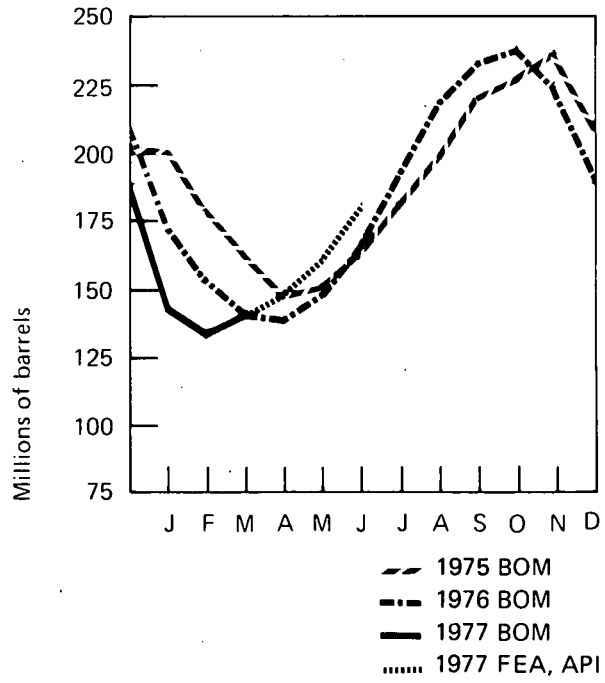


Stocks

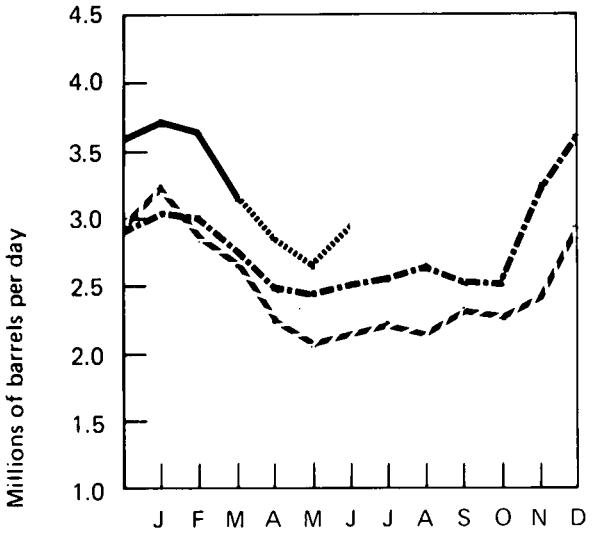


Residual Fuel Oil

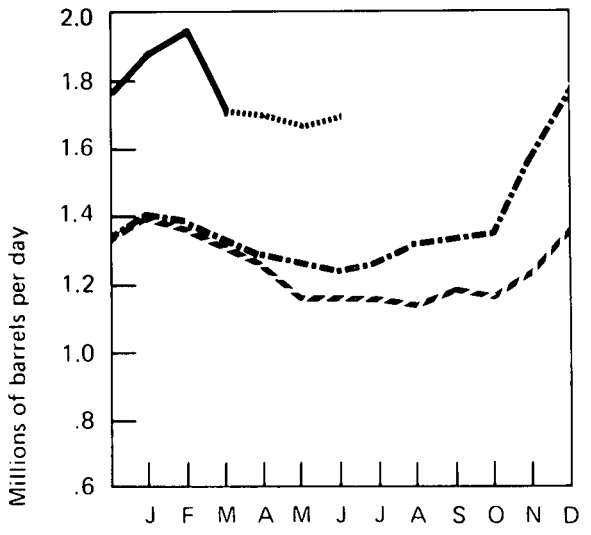
		Domestic Demand	Production	Imports	Stocks
		Thousands of barrels per day			Thousands of barrels
1972	**AVERAGE**	**2,529**	**799**	**1,742**	***55,216**
1973	**AVERAGE**	**2,822**	**971**	**1,853**	***53,480**
1974	**AVERAGE**	**2,639**	**1,070**	**1,587**	***59,694**
1975	January	3,253	1,415	1,657	**69,233
	February	2,849	1,354	1,402	66,495
	March	2,669	1,299	1,293	64,148
	April	2,232	1,245	1,054	66,340
	May	2,087	1,151	1,160	73,498
	June	2,177	1,152	902	69,660
	July	2,220	1,155	1,125	71,526
	August	2,157	1,146	1,021	71,857
	September	2,328	1,183	1,311	76,938
	October	2,268	1,165	1,251	81,858
	November	2,405	1,214	1,225	83,131
	December	2,912	1,354	1,283	74,126
	AVERAGE	**2,462**	**1,235**	**1,223**	
1976	January	3,069	1,415	1,406	66,592
	February	3,007	1,394	1,703	68,859
	March	2,779	1,311	1,342	65,132
	April	2,496	1,283	1,258	66,458
	May	2,439	1,257	1,134	65,147
	June	2,520	1,241	1,240	64,272
	July	2,555	1,266	1,462	69,812
	August	2,678	1,321	1,307	68,490
	September	2,517	1,330	1,442	76,436
	October	2,511	1,351	1,234	79,117
	November	3,253	1,581	1,474	73,284
	December	3,608	1,772	1,791	72,344
	AVERAGE	**2,786**	**1,377**	**1,402**	
1977	January	R3,741	1,889	R1,596	64,749
	February	R3,662	R1,951	R1,943	71,414
	March	R3,150	R1,715	R1,417	R71,186
	April	R2,861	1,703	R1,131	70,165
	May	R2,649	R1,668	R1,093	R73,376
	June	2,946	1,706	1,221	69,061
	AVERAGE (6 months)	**3,163**	**1,770**	**1,394**	

*Total as of December 31.
**Bureau of Mines' stock coverage was expanded at the end of 1974 to include an additional 100 bulk terminal operators; the new coverage begins here with January 1975.
R=Revised data.
Sources: Bureau of Mines (BOM) *Mineral Industry Surveys,* "Petroleum Statement, Annual" and "Petroleum Statement, Monthly" through March 1977; Federal Energy Administration (FEA) "Monthly Petroleum Statistics Report" for April and May 1977; June 1977 data are FEA estimates based on data from the American Petroleum Institute (API) "Weekly Statistical Bulletin."

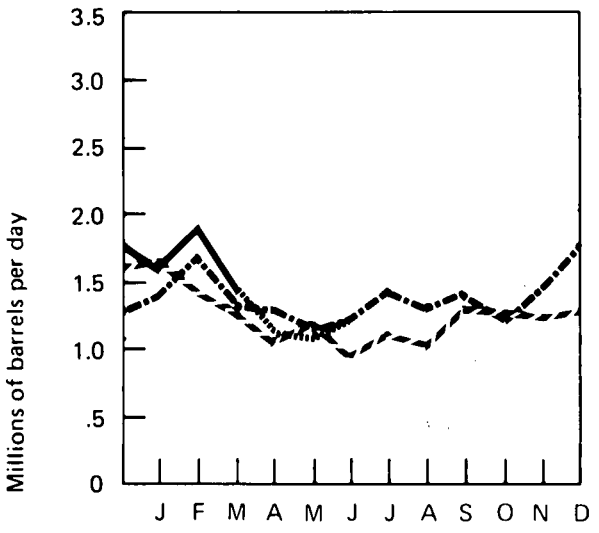
Domestic Demand



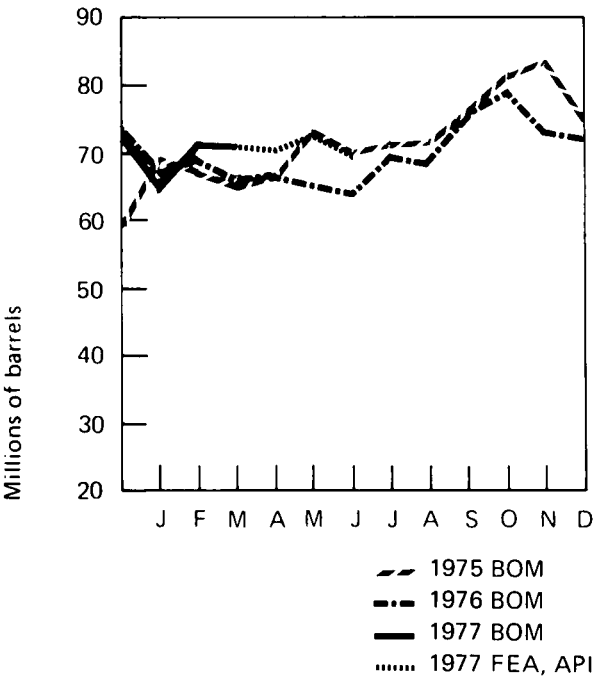
Production



Imports



Stocks

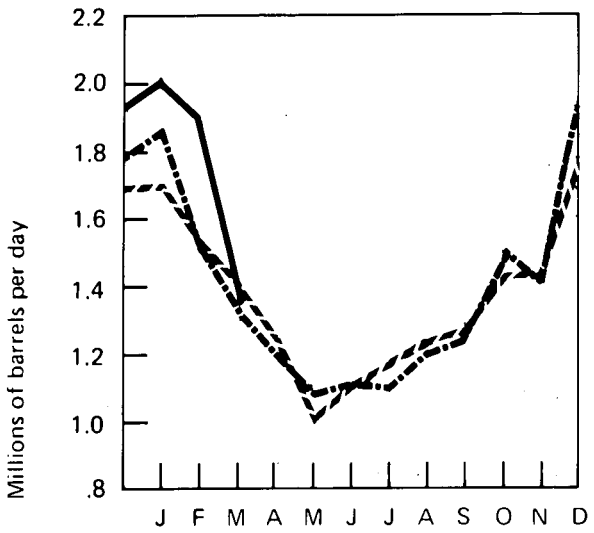


Natural Gas Liquids

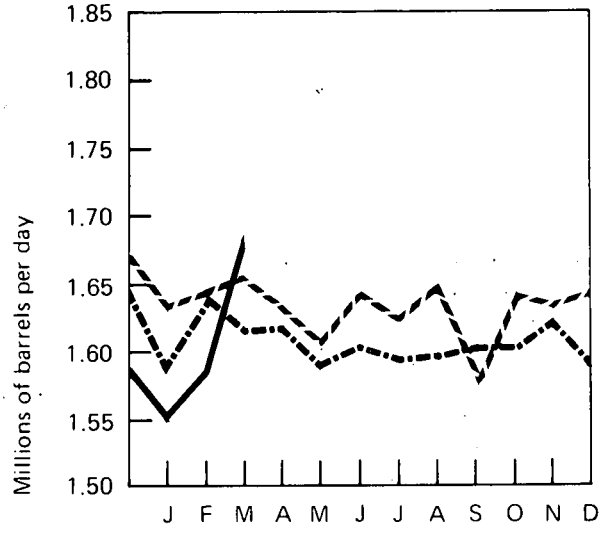
		Domestic Demand*	Production*		Used at Refineries*	Imports	Stocks*
			At processing plants	At refineries			
			Thousands of barrels per day				Thousands of barrels
1972	**AVERAGE**	**1,420**	**1,744**	**365**	**826**	**174**	****92,024**
1973	**AVERAGE**	**1,454**	**1,738**	**375**	**815**	**239**	****106,659**
1974	**AVERAGE**	**1,422**	**1,688**	**338**	**746**	**212**	****120,175**
1975	January	1,708	1,630	307	756	257	110,697
	February	1,512	1,646	296	734	181	106,205
	March	1,404	1,658	280	731	178	104,365
	April	1,242	1,635	273	667	176	105,521
	May	1,002	1,607	299	628	97	119,052
	June	998	1,646	323	659	166	132,553
	July	1,191	1,621	336	701	173	139,095
	August	1,227	1,650	357	690	163	145,920
	September	1,278	1,577	326	703	209	148,948
	October	1,429	1,643	310	729	198	147,793
	November	1,444	1,635	309	759	196	145,052
	December	1,787	1,646	310	768	232	132,653
	AVERAGE	**1,352**	**1,633**	**311**	**710**	**185**	
1976	January	1,885	1,585	305	728	240	116,707
	February	1,518	1,640	316	793	270	113,373
	March	1,303	1,615	333	674	194	117,486
	April	1,201	1,616	349	716	171	123,100
	May	1,074	1,588	376	695	144	131,421
	June	1,110	1,606	356	718	163	139,291
	July	1,103	1,592	354	710	147	147,034
	August	1,213	1,596	362	695	160	152,704
	September	1,243	1,601	352	713	152	156,436
	October	1,497	1,601	309	709	203	152,666
	November	1,413	1,621	331	726	244	143,422
	December	1,921	1,589	341	853	269	124,518
	AVERAGE	**1,407**	**1,604**	**340**	**725**	**196**	
1977	January	2,018	1,549	323	730	331	106,524
	February	1,887	1,589	336	693	238	94,128
	March	1,354	1,687	331	688	239	100,025
	AVERAGE (3 months)	**1,749**	**1,609**	**330**	**704**	**270**	

*See Explanatory Note 4.
**Total as of December 31.
Note: The stocks series has been revised to include stocks of liquefied refinery gas (LRG).
Source: Bureau of Mines *Mineral Industry Surveys,* "Petroleum Statement, Monthly."

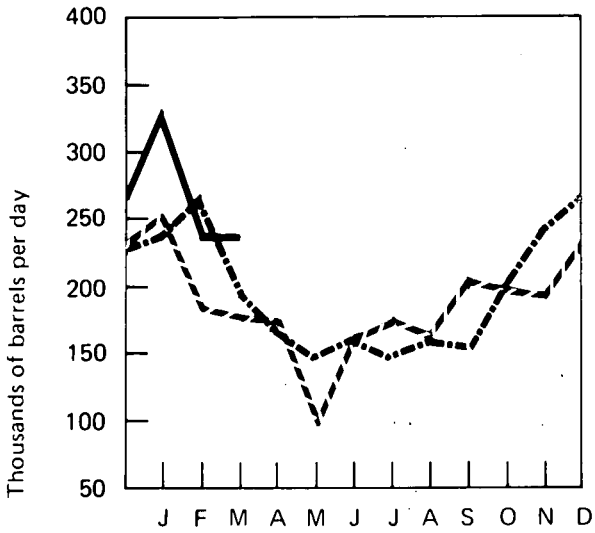
Domestic Demand



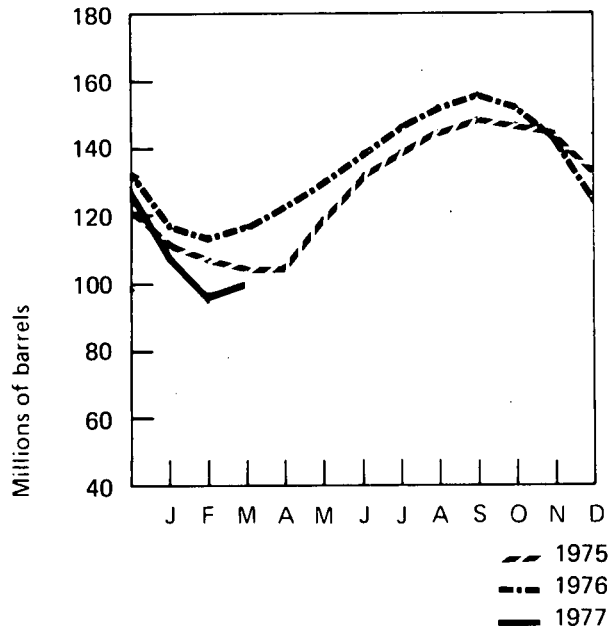
Production at Processing Plants



Imports



Stocks



U.S. Petroleum Supply and Demand

	1976 Actual				
	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	Year
	Thousands of barrels per day				
Supply					
Crude oil and lease condensate production	8,194	8,131	8,120	8,033	8,119
Natural gas plant liquids production	1,612	1,604	1,597	1,604	1,604
Other hydrocarbon supply	37	38	37	40	38
Crude oil imports	4,520	5,023	5,740	5,856	5,287
Refined products imports*	2,140	1,771	1,987	2,130	2,008
Total new supply	16,503	16,567	17,481	17,663	17,056
Processing gain	485	495	469	460	478
Stock change–all oils	-797	+363	+1,065	-866	-58
Total net supply	17,785	16,699	16,885	18,989	17,592
Unaccounted for crude oil**	+204	+8	+42	+101	+89
Demand					
Crude oil and refined products exports	192	204	220	274	223
Crude oil losses	14	14	15	15	14
Domestic demand for refined products***	17,783	16,489	16,692	18,801	17,444
Total demand	17,989	16,707	16,927	19,090	17,681

	Actual	1977 Forecast †			
	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	Year ††
	Thousands of barrels per day				
Supply					
Crude oil and lease condensate production	7,956	8,107	8,600	8,988	8,416
Natural gas plant liquids production	1,609	1,541	1,524	1,541	1,553
Other hydrocarbon supply	44	36	36	36	38
Crude oil imports	6,420	6,106	6,007	5,635	6,040
Refined products imports*	2,813	1,673	1,659	2,504	2,160
Total new supply	18,842	17,463	17,826	18,704	18,207
Processing gain	520	512	523	518	518
Stock change–all oils	-278	+565	+594	-165	+180
Total net supply	19,640	17,410	17,755	19,387	18,545
Unaccounted for crude oil**	+214	0	0	0	+52
Demand					
Crude oil and refined products exports	210	206	198	195	202
Crude oil losses	15	13	13	13	13
Domestic demand for refined products***	19,629	17,191	17,544	19,179	18,382
Total demand	19,854	17,410	17,755	19,387	18,597

*Includes plant condensate and unfinished oils.
**Balancing item resulting from statistical inconsistencies.
***Includes international bunkers.
†See Explanatory Note 5 for discussion of basic assumptions for forecast.
††Calculated using actual 1st Quarter data and FEA forecast for remainder of year.
Note: 1st Quarter and year data for 1977 have been revised.
Sources: 1976–Bureau of Mines *Mineral Industry Surveys,* "PAD Districts Supply/Demand;" 1st Quarter 1977–BOM *Mineral Industry Surveys,* "Petroleum Statement, Monthly;" 2nd, 3rd, and 4th Quarters 1977–FEA forecast.

Natural Gas

Following 4 months of increased production rates, estimated marketed production of natural gas in June dropped 1.0 percent below the June 1976 level. Production for the first 6 months of 1977 was estimated to be 0.6 percent above the production total for the same period of 1976.

Imports of natural gas in June were estimated to be 1.3 percent higher than imports in June 1976, and for first 6 months of 1977 were estimated to be 6.3 percent above imports during the same months of 1976.

Domestic consumption of natural gas in June was estimated to be 6.8 percent below consumption in June 1976. Consumption in the first 6 months of 1977 was estimated to be 3.3 percent below consumption during the same period of 1976.

Net injections of natural gas into underground storage reservoirs in June totaled 312 billion cubic feet, 9.5 percent greater than net injections in June 1976. The volume of working gas* in underground storage at the end of June was 6.1 percent above the volume in storage a year earlier.

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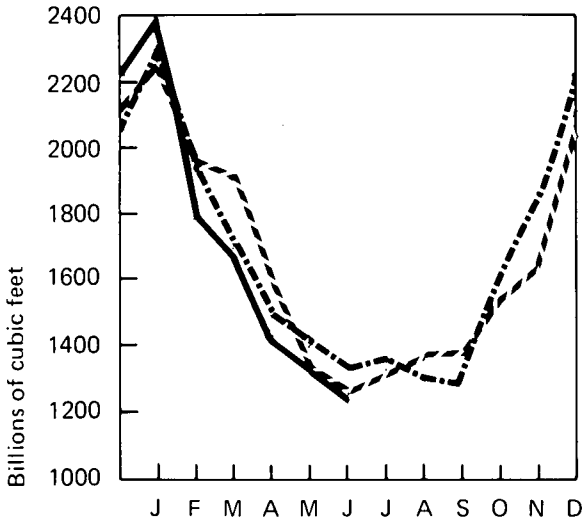
*Gas available for withdrawal.

Natural Gas

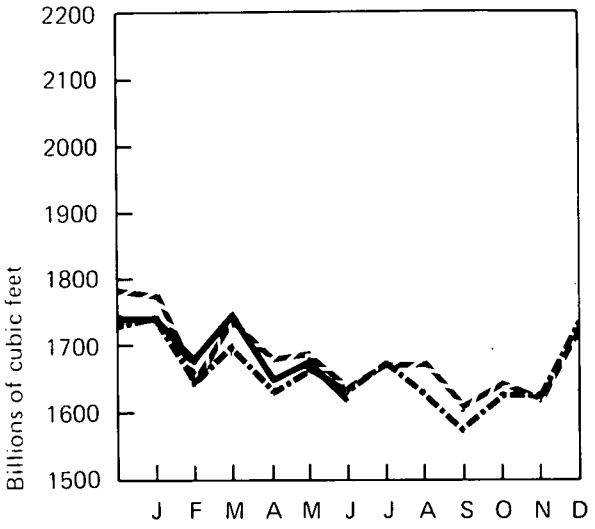
		Domestic Consumption*	Marketed Production*	Domestic Producer Sales to Major Interstate Pipelines	Imports
			Billion cubic feet		
1972	**TOTAL**	**22,102**	**22,532**	**12,429**	**1,019**
1973	**TOTAL**	**22,049**	**22,648**	**12,067**	**1,033**
1974	**TOTAL**	**21,223**	**21,601**	**11,462**	**959**
1975	January	2,248	1,778	950	81
	February	1,939	1,640	867	75
	March	1,903	1,740	948	83
	April	1,575	1,677	906	82
	May	1,331	1,689	898	80
	June	1,257	1,634	859	76
	July	1,313	1,677	873	80
	August	1,369	1,677	882	75
	September	1,370	1,603	836	74
	October	1,544	1,646	877	80
	November	1,640	1,618	853	81
	December	2,049	1,730	903	86
	TOTAL	**19,538**	**20,109**	**10,652**	**953**
1976	January	R2,288	1,745	894	83
	February	R1,935	1,641	850	79
	March	R1,717	1,709	894	85
	April	R1,505	1,633	849	85
	May	R1,431	1,668	860	83
	June	R1,331	1,637	815	77
	July	R1,369	1,671	822	74
	August	R1,313	1,631	810	76
	September	R1,298	1,562	793	74
	October	R1,618	1,632	840	85
	November	R1,871	1,629	841	81
	December	R2,229	1,745	872	84
	TOTAL	**R19,905**	**19,903**	**10,140**	**966**
1977	January	R2,394	1,742	848	85
	February	R1,796	1,671	807	85
	March	R1,687	R1,744	NA	***103
	April	R1,420	R**1,646	NA	***87
	May	R1,330	R***1,670	NA	***85
	June	1,240	***1,620	NA	***78
	TOTAL (6 months)	**9,867**	**10,093**	**NA**	**523**

*See Explanatory Note 6.
**Preliminary data.
***Projected data.
R=Revised data.
NA=Not available.
Note: All monthly Domestic Consumption data are estimated.
Sources: Domestic Consumption—Bureau of Mines, "Minerals and Materials/A Monthly Survey" (advance estimates are subject to revision prior to publication by BOM); Marketed Production and Imports—Bureau of Mines *Mineral Industry Surveys,* "Natural Gas, Monthly;" Domestic Producer Sales—Federal Power Commission Form 11, "Monthly Statement of Gas Operating Revenues, Sales."

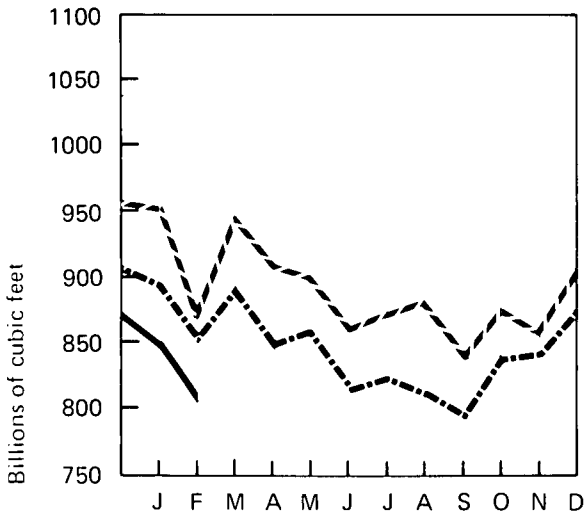
Domestic Consumption



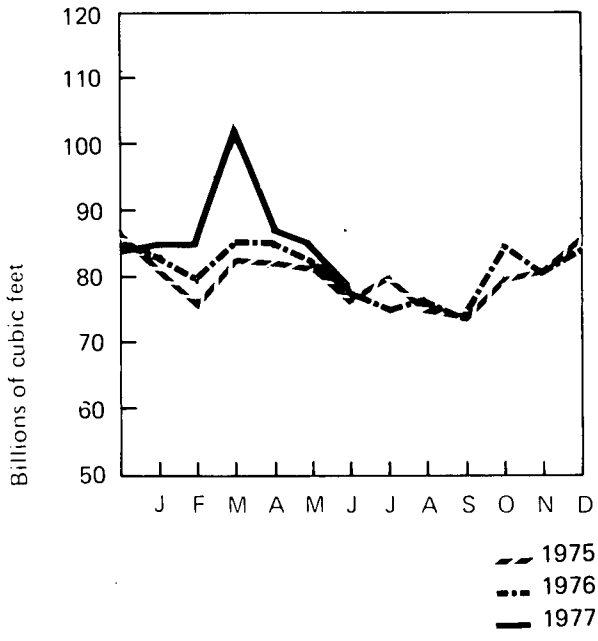
Marketed Production



Domestic Producer Sales to Major Interstate Pipelines



Imports

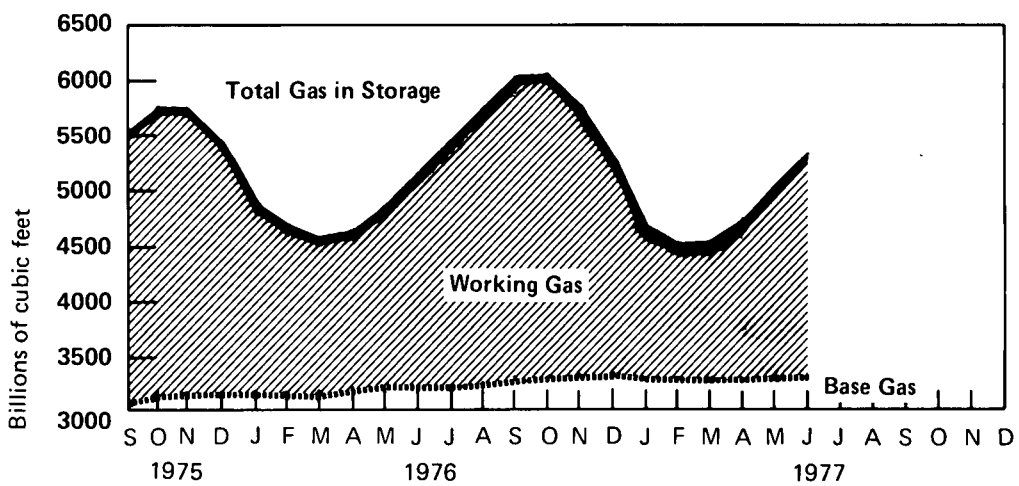


Natural Gas (Continued)

Natural Gas in Underground Storage*

		Total Gas in Storage	Base Gas	Working Gas	Storage Injections	Storage Withdrawals	Net Storage Injections
				Billion cubic feet			
1974	October**	5,445	3,042	2,403	***	***	***
1975	September	5,558	3,084	2,474	225	31	193
	October	5,770	3,128	2,642	248	94	154
	November	5,760	3,172	2,588	99	150	-51
	December	5,423	3,173	2,250	35	375	-340
1976	January	4,868	3,194	1,674	22	574	-552
	February	4,660	3,197	1,463	67	275	-208
	March	4,543	3,195	1,348	81	199	-118
	April	4,650	3,208	1,443	176	70	106
	May	4,878	3,214	1,664	262	34	228
	June	5,163	3,220	1,943	312	27	285
	July	5,476	3,244	2,232	311	11	300
	August	5,759	3,272	2,487	295	13	282
	September	6,021	3,317	2,704	267	21	246
	October	6,030	3,327	2,703	132	123	9
	November	5,779	3,330	2,449	41	298	-257
	December	5,284	3,334	1,950	23	518	-495
1977	January	4,621	3,317	1,304	17	681	-664
	February	4,490	3,307	1,183	104	234	-130
	March	4,544	3,310	1,234	190	137	53
	April	4,755	3,311	1,444	256	45	211
	May	5,074	3,317	1,757	338	18	320
	June	5,386	3,324	2,062	322	10	312

Gas in Storage



*See Explanatory Note 7.
**Data reported as of November 1, 1974.
***Between November 1, 1974, and August 31, 1975, a total of 1,658 billion cubic feet of gas was injected into storage and 1,686 billion cubic feet was withdrawn, for net storage injections of -28 billion cubic feet.
Sources: Federal Energy Administration Form G318-M-O and Federal Power Commission Form 8.

In June, for the first time, weekly production of bituminous coal and lignite exceeded 15 million tons. (This occurred during the first 2 weeks of the month.) This peak production reflects the startup of new production capacity, primarily in the West. The production total for the month was 63.8 million tons, an increase of 9.2 percent over the June 1976 level. The high production levels in the first part of the month compensated for losses at the end of the month caused by a series of wildcat strikes in West Virginia, Virginia, Kentucky, and Alabama; and the United Mine Workers' annual vacation which began on June 25. Production for the first half of 1977 was 1.6 percent greater than the production level during the same period in 1976.

Domestic consumption of bituminous coal and lignite for April 1977 was 46.9 million tons, essentially unchanged from the April 1976 level. April 1977 consumption by the electric utility sector was 33.9 million tons compared with a monthly average consumption rate of 39.3 million tons during the first quarter of the year.

Stocks of bituminous coal and lignite on April 30, 1977, were 129.8 million tons, with electric utilities accounting for 88 percent of the total. Utilities continued to buildup their stocks in April to a 101 days' supply from a 75 days' supply in January and February and a 90 days' supply in March. Stocks of coking coal, plus the effective original coal supply represented by coke stocks,* were 20.3 million tons at the end of April, or a 90 days' supply. Coal stocks for general industry (nonutility, nonecoke), were 6.3 million tons, a 33 days' supply at current burn rates.

In May 1977 the United States exported 5.7 million tons of coal. Canada and Japan received 42.9 percent and 23.2 percent, respectively. Shipments for the January through May period were 19.9 million tons, 10.1 percent below the amount exported a year earlier and 27.7 percent below the amount for the January-May period of 1975.

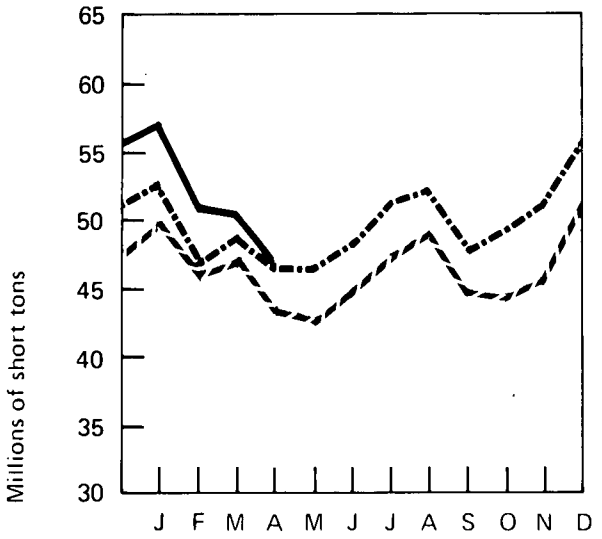
*Coking coal stocks were 9.9 million tons and coke stocks were 7.1 million tons, the latter representing 10.4 million tons of original coking coal at a 1.47 coal to coke ratio.

Bituminous and Lignite

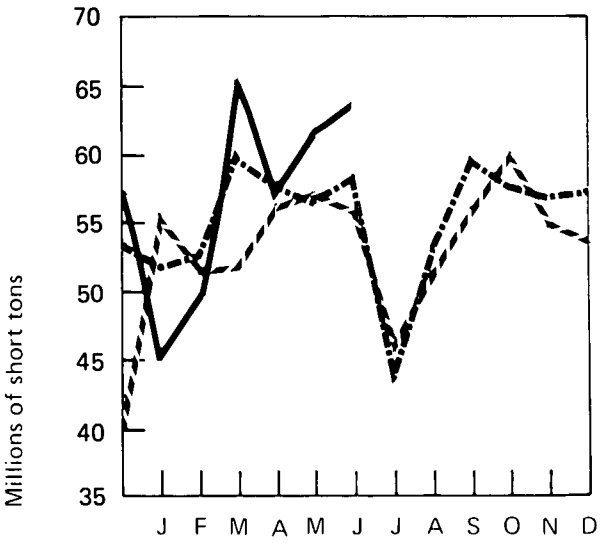
		Domestic Consumption*	Production*	Exports	Stocks
		Thousands of short tons			
1972	**TOTAL**	**516,776**	**595,386**	**55,997**	****117,442**
1973	**TOTAL**	**556,022**	**591,738**	**52,903**	****103,022**
1974	**TOTAL**	**552,709**	**603,406**	**59,926**	****95,528**
1975	January	49,841	55,610	4,254	95,512
	February	45,699	51,135	4,470	97,028
	March	47,202	51,910	5,653	97,832
	April	43,537	56,330	6,159	102,663
	May	42,658	57,045	7,011	109,666
	June	44,777	55,730	6,269	114,857
	July	47,454	45,560	4,691	109,133
	August	49,190	51,160	5,859	108,522
	September	44,032	56,060	4,529	111,922
	October	44,929	60,030	4,647	120,344
	November	45,946	54,655	7,593	125,808
	December	51,036	53,213	4,534	127,115
	TOTAL***	**556,301**	**648,438**	**65,669**	
1976	January	52,919	51,501	3,697	119,149
	February	46,800	52,636	3,050	118,970
	March	48,607	60,056	3,979	123,441
	April	46,450	57,856	5,780	128,343
	May	46,506	56,611	5,667	134,621
	June	48,472	58,436	6,569	140,237
	July	51,696	43,250	4,879	129,606
	August	52,069	53,440	4,223	123,662
	September	47,750	59,675	5,613	129,867
	October	49,248	57,498	5,871	133,581
	November	51,320	56,995	5,451	135,402
	December	55,642	57,046	4,625	133,673
	TOTAL***	**597,479**	**665,000**	**59,406**	
1977	January	R57,032	44,555	2,143	118,080
	February	R50,756	49,750	3,079	114,387
	March	50,238	65,020	3,390	122,584
	April	46,886	57,160	5,637	129,830
	May	NA	61,560	5,673	NA
	June	NA	63,810	NA	NA
	TOTAL***	**204,914** (4 months)	**342,470** (6 months)	**19,922** (5 months)	

*See Explanatory Note 8.
**Total as of December 31.
***Totals may not add due to rounding.
R=Revised data.
NA=Not available.
Source: Bureau of Mines *Mineral Industry Surveys,* "Weekly Coal Report."

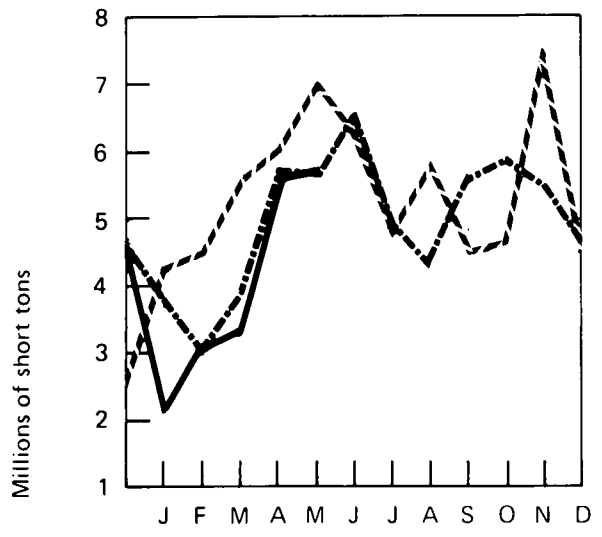
Domestic Consumption



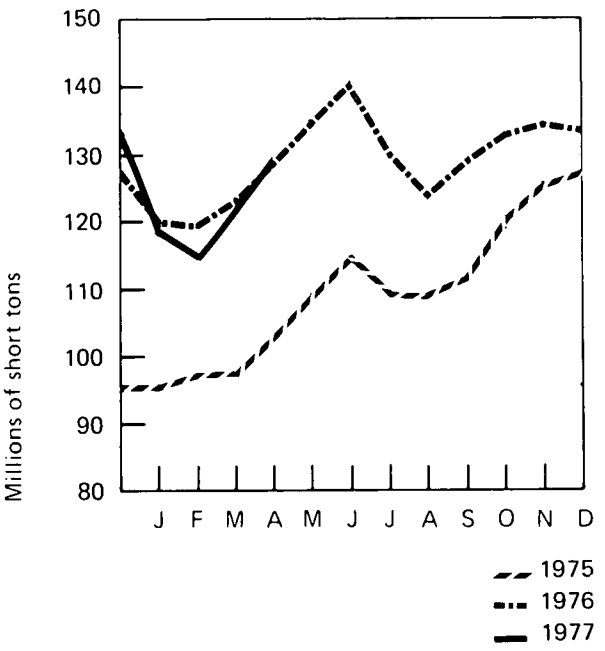
Production



Exports



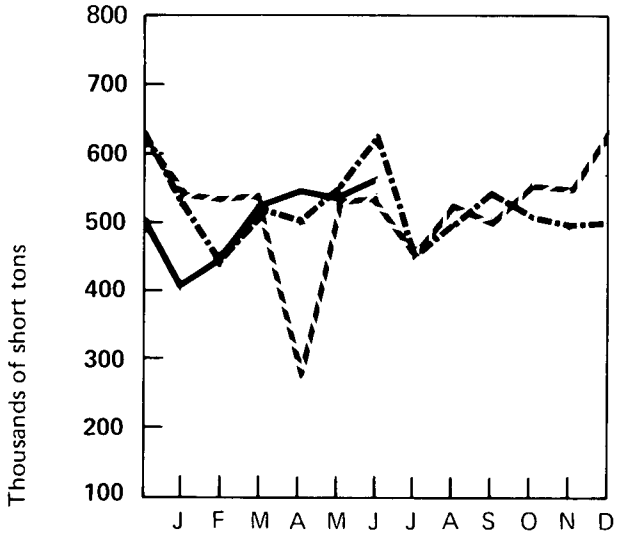
Stocks



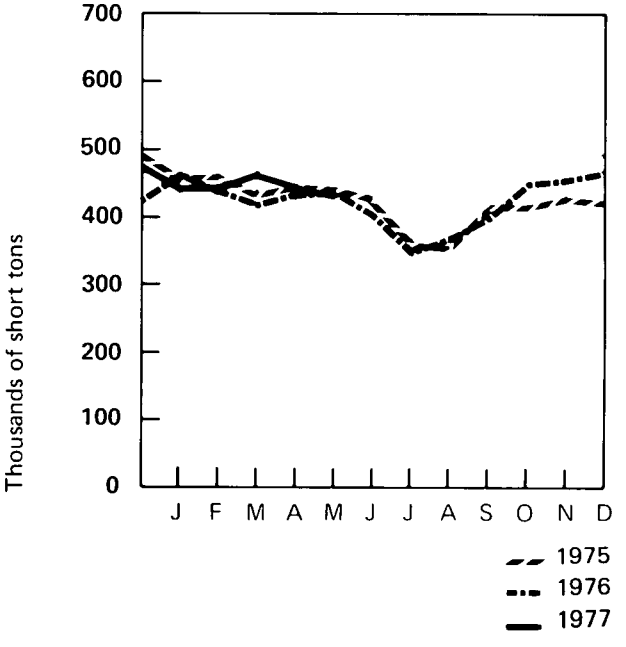
Anthracite

		Production	Apparent Domestic Consumption
		Thousands of short tons	
1972	**TOTAL**	**7,106**	**5,915**
1973	**TOTAL**	**6,830**	**5,671**
1974	**TOTAL**	**6,617**	**5,448**
1975	January	540	459
	February	535	465
	March	544	435
	April	270	450
	May	535	445
	June	544	430
	July	455	360
	August	535	356
	September	500	425
	October	560	420
	November	555	435
	December	630	428
	TOTAL	**6,203**	**5,108**
1976	January	530	460
	February	440	430
	March	530	420
	April	500	435
	May	555	440
	June	630	400
	July	450	350
	August	500	375
	September	550	400
	October	510	455
	November	500	460
	December	505	475
	TOTAL	**6,200**	**5,100**
1977	January	400	440
	February	450	450
	March	530	470
	April	550	450
	May	540	440
	June	570	NA
	TOTAL	**3,040** (6 months)	**2,250** (5 months)

Production



Apparent Domestic Consumption



NA=Not available.
Source: Bureau of Mines "Mineral and Materials/A Monthly Survey."

Electric Utilities

June 1977 production of electricity by utilities is estimated at 180.0 billion kilowatt hours, 3.8 percent above the level for June 1976. Total production during the first half of 1977 is estimated at 1.04 trillion kilowatt hours, 5.3 percent above the level for the first half of 1976.

Electric utility oil consumption during the first 4 months of 1977 was 19.6 percent higher than during the same period in 1976, corresponding to the 19.8 percent increase in generation from oil. Electric utility coal consumption during the first 4 months was up 4.9 percent and natural gas consumption was 0.4 percent higher.

Edison Electric Institute data indicate that sales of electricity to industrial customers during April 1977 totaled 62.0 billion kilowatt hours, 5.2 percent above the level for April 1976. Sales to commercial customers during the month totaled 35.3 billion kilowatt hours, up 5.5 percent. Sales to residential customers rose 5.2 percent to 47.7 billion kilowatt hours.

Sales of electricity to industrial customers increased in spite of a 4.5-percent increase in the real price of electricity to these customers. The primary causes of the increase appear to be a 6.2-percent rise in industrial output over the period and a 2.9-percent increase in the number of industrial electricity customers.

Sales of electricity to commercial customers increased although there was a 4.3-percent real increase in commercial electricity prices. Factors affecting the growth were increased activity in the services sector of the economy and a 2.0-percent growth in the number of commercial electricity customers.

The increase in residential electricity sales appears to be due to the 2.3-percent growth in the number of residential electricity customers and a moderately low 2.0-percent increase in real residential electricity prices.

Cooling Degree-Days

For the period July 4 through July 31, 1977, the Nation accumulated 16 percent more cooling degree-days than normal and 19 percent more than for the same period in 1976, indicating warmer than normal weather.

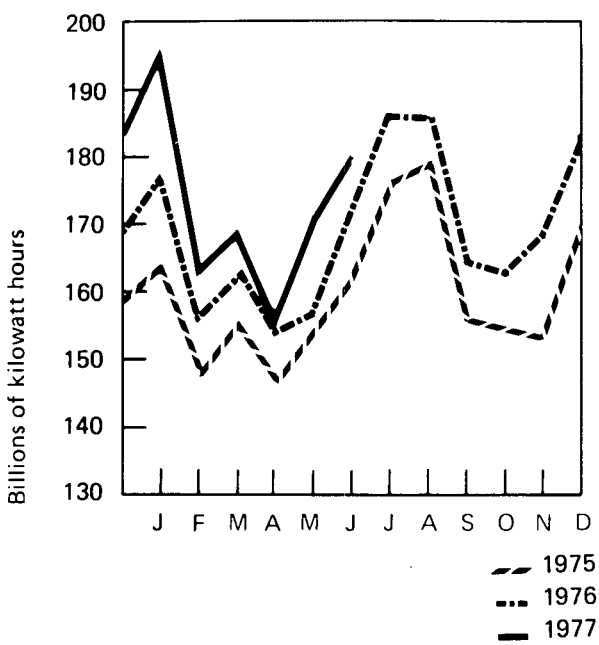
Regionally, cooling degree-day accumulations ranged from 3 percent above normal in the Rocky Mountain States to 32 percent above normal in the Midwest.

National average cumulative degree-days for the period January 1 through July 31, 1977, were 15 percent above normal and 17 percent above the corresponding 1976 period.

Electric Utilities

		Total Net Production	Percentage Produced from Each Source					
		Millions of kilowatt hours	Coal	Oil	Gas	Nuclear	Hydro-electric	Other*
1972	**TOTAL**	**1,749,629**	**AVG. 44.2**	**15.6**	**21.4**	**3.1**	**15.6**	**0.1**
1973	**TOTAL**	**1,860,440**	**AVG. 45.7**	**16.8**	**18.3**	**4.5**	**14.6**	**0.1**
1974	**TOTAL**	**1,867,103**	**AVG. 44.5**	**16.0**	**17.2**	**6.1**	**16.1**	**0.1**
1975	January	164,325	45.6	18.6	12.0	8.5	15.2	0.1
	February	147,080	45.8	16.9	12.3	8.7	16.2	0.1
	March	155,481	44.5	14.9	12.9	9.6	18.0	0.1
	April	146,217	44.1	14.5	13.9	9.1	18.2	0.2
	May	153,231	42.2	13.7	16.8	9.0	18.1	0.2
	June	162,442	43.3	14.2	17.8	7.8	16.7	0.2
	July	176,815	43.2	14.2	19.3	8.7	14.4	0.2
	August	179,714	43.9	15.6	18.9	8.8	12.6	0.2
	September	155,223	44.2	13.8	19.3	9.3	13.2	0.2
	October	154,944	44.6	14.2	17.0	9.4	14.6	0.2
	November	152,794	46.1	14.1	14.3	9.3	16.0	0.2
	December	169,372	46.5	15.9	12.2	9.9	15.3	0.2
	TOTAL	**1,917,638**	**AVG. 44.5**	**15.1**	**15.6**	**9.0**	**15.6**	**0.2**
1976	January	R178,314	46.9	18.1	11.2	9.0	14.6	0.2
	February	156,671	46.9	15.8	12.2	9.2	15.7	0.2
	March	164,160	46.6	15.5	13.0	8.5	16.2	0.2
	April	153,154	47.4	15.2	14.3	7.2	15.7	0.2
	May	157,355	46.1	13.8	16.1	7.6	16.2	0.2
	June	173,370	44.4	14.5	17.1	9.1	14.7	0.2
	July	186,409	44.7	14.5	17.1	9.5	14.0	0.2
	August	186,380	45.2	15.2	16.8	9.8	12.8	0.2
	September	165,009	45.7	14.3	17.0	10.5	12.3	0.2
	October	163,709	47.0	14.8	14.6	10.6	12.8	0.2
	November	169,053	48.3	17.8	12.5	9.5	11.7	0.2
	December	R183,843	47.4	18.6	11.3	11.5	11.0	0.2
	TOTAL	**R2,037,427**	**46.4**	**15.7**	**14.4**	**9.4**	**13.9**	**0.2**
1977	January	R196,350	45.7	22.1	10.2	11.2	10.6	0.2
	February	R162,727	48.4	18.1	12.0	12.0	9.3	0.2
	March	R169,129	45.8	16.8	13.3	12.2	11.7	0.2
	April	R155,564	45.0	16.4	13.7	R12.7	12.0	0.2
	May	171,652	NA	NA	NA	R12.1	NA	NA
	June	180,028	NA	NA	NA	11.8	NA	NA
	TOTAL (6 months)	**1,035,450**						

Total Net Production



*Includes electricity produced from geothermal power, wood, and waste.
NA=Not available.
R=Revised.
Sources: 1972 through April 1977—Federal Power Commission Form 4; May and June 1977—Edison Electric Institute.

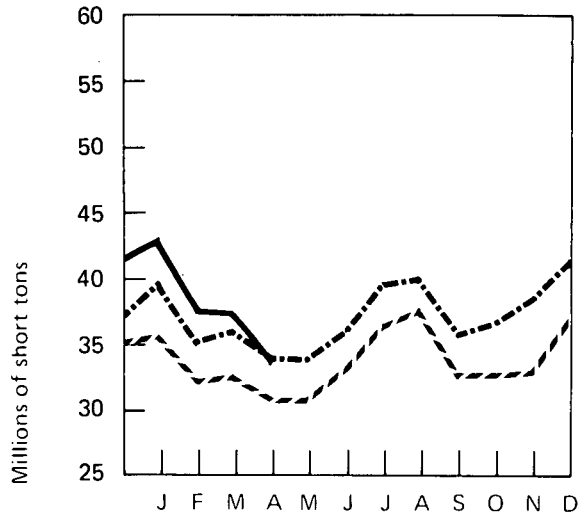
Electric Utilities (Continued)

Fuel Consumption

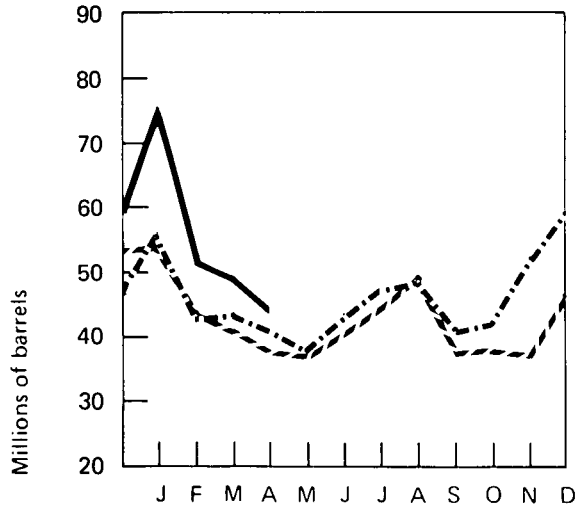
		Coal	Oil			Gas
		Thousands of short tons	Steam*	Gas Turbine/ Internal Combustion**	Total	Millions of cubic feet
			Thousands of barrels			
1972	**TOTAL**	**352,392**	**440,229**	**53,463**	**493,692**	**3,976,770**
1973	**TOTAL**	**389,707**	**513,127**	**47,020**	**560,147**	**3,659,388**
1974	**TOTAL**	**392,423**	**482,524**	**53,721**	**536,245**	**3,443,293**
1975	January	35,843	48,678	5,370	54,048	205,096
	February	32,097	39,794	3,750	43,544	188,922
	March	32,793	37,408	3,007	40,415	211,184
	April	30,547	34,702	2,335	37,037	214,250
	May	30,574	33,720	3,266	36,986	275,097
	June	33,456	36,825	4,118	40,943	307,901
	July	36,567	40,520	3,893	44,413	362,088
	August	37,967	44,565	4,755	49,320	360,199
	September	32,609	35,124	1,917	37,041	315,877
	October	32,853	36,137	1,893	38,030	275,266
	November	33,333	35,743	1,794	37,537	227,748
	December	37,390	43,724	3,090	46,814	213,957
	TOTAL	**406,029**	**466,940**	**39,188**	**506,128**	**3,157,585**
1976	January	39,986	51,114	4,968	56,082	R206,365
	February	34,965	40,452	2,671	43,123	R199,299
	March	36,099	41,154	2,795	43,949	222,605
	April	33,805	37,663	R2,483	R40,146	227,699
	May	33,944	35,651	2,215	37,866	R266,470
	June	36,381	40,065	3,568	43,633	R313,143
	July	39,841	43,143	R4,077	R47,220	337,372
	August	40,329	45,626	R3,437	R49,063	329,493
	September	35,894	38,245	R2,517	R40,762	294,818
	October	36,775	39,095	3,097	42,192	249,738
	November	38,837	47,340	R4,961	R52,301	216,914
	December	41,575	53,940	R5,545	R59,485	214,406
	TOTAL	**448,431**	**513,488**	**R42,334**	**R555,822**	**R3,078,322**
1977	January	43,254	R66,263	R9,635	R75,898	R205,044
	February	R37,644	R47,606	R3,214	R50,820	R200,334
	March	R37,283	46,069	R2,592	R48,661	R231,485
	April	33,736	41,594	2,272	43,866	222,581
	TOTAL (4 months)	**151,917**	**201,532**	**17,713**	**219,245**	**859,444**

*Primarily residual fuel oil.
**Primarily middle distillates.
Source: Federal Power Commission Form 4.

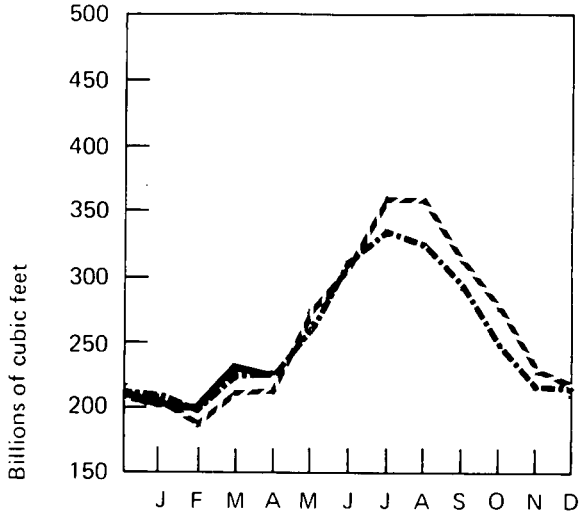
Coal Consumption



Oil Consumption



Gas Consumption



1975
1976
1977

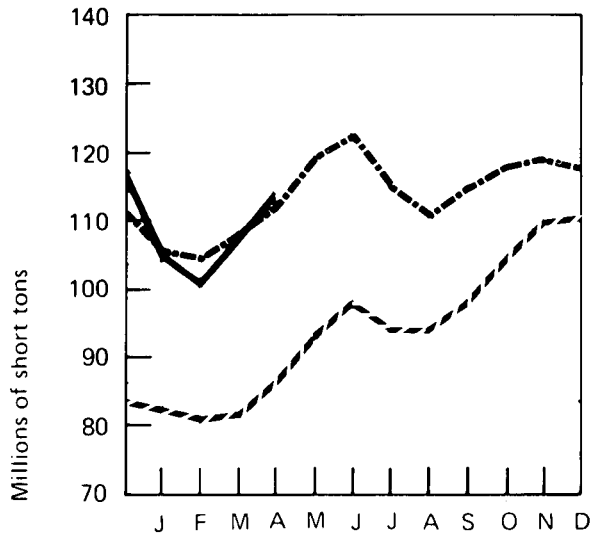
Electric Utilities (Continued)

Stocks at End of Month

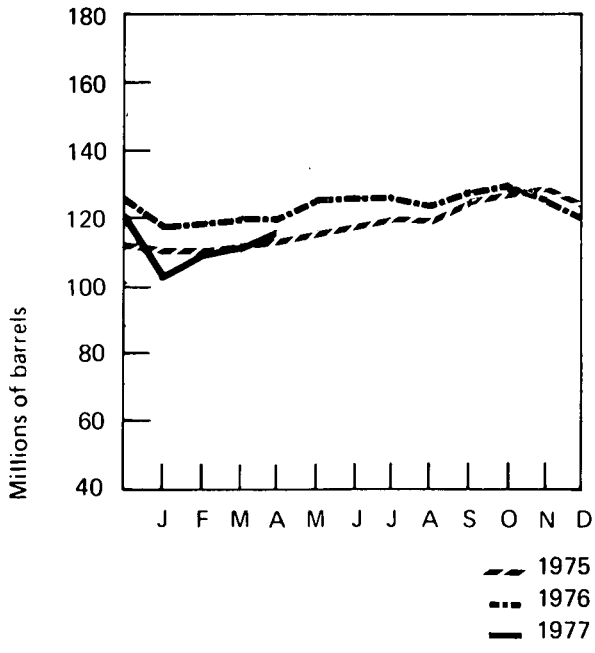
		Coal	Oil		
		Thousands of short tons	Steam*	Gas Turbine/ Internal Combustion**	Total
			Thousands of barrels		
1972		***100,009	***52,575	***5,079	***57,654
1973		***87,279	***79,121	***10,095	***89,216
1974		***83,542	***97,201	***15,715	***112,916
1975	January	82,088	95,579	15,716	111,295
	February	80,972	95,762	15,738	111,500
	March	81,885	97,333	16,310	113,643
	April	86,829	98,004	16,294	114,298
	May	93,869	101,464	15,767	117,231
	June	98,031	103,222	15,714	118,936
	July	94,278	105,334	15,905	121,239
	August	94,213	104,926	15,739	120,665
	September	98,096	109,678	16,635	126,313
	October	105,415	112,107	16,774	128,881
	November	110,313	113,231	17,110	130,341
	December	110,750	108,358	16,886	125,244
1976	January	105,518	102,023	R15,922	R117,945
	February	104,874	102,147	16,705	118,852
	March	108,450	104,072	16,465	120,537
	April	112,862	103,747	16,640	120,387
	May	119,611	109,132	16,960	126,092
	June	123,048	109,649	16,618	126,267
	July	115,204	110,818	15,859	126,677
	August	110,752	109,812	15,993	125,805
	September	115,399	112,955	17,041	129,996
	October	118,566	114,426	16,934	131,360
	November	119,298	111,127	R15,498	R126,625
	December	117,468	106,730	R14,951	R121,681
1977	January	104,836	R89,905	R12,962	R102,867
	February	R101,916	95,621	R14,393	R110,014
	March	R108,307	R96,581	R15,769	R112,350
	April	114,027	100,934	16,046	116,980

*Primarily residual fuel oil.
**Primarily middle distillates.
***As of December 31.
R=Revised.
Source: Federal Power Commission Form 4.

Coal Stocks



Oil Stocks

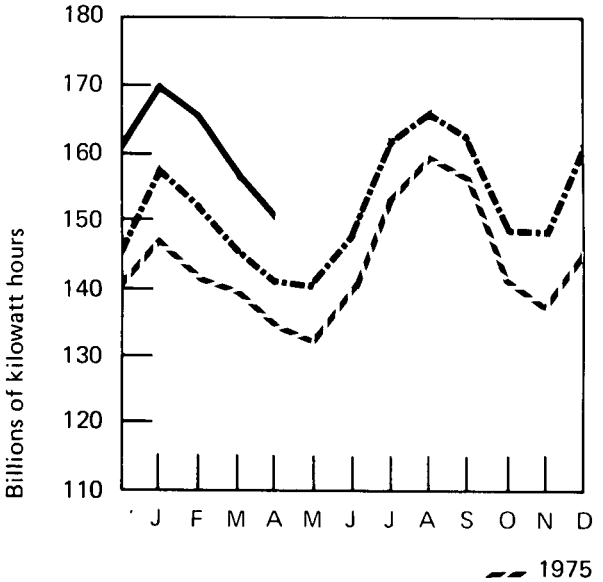


Electric Utilities (Continued)

Electricity Sales

		Residential	Commercial	Industrial	Other*	Total
			Millions of kilowatt hours			
1972	**TOTAL**	**538,609**	**359,265**	**640,978**	**56,309**	**1,595,161**
1973	**TOTAL**	**579,231**	**388,266**	**686,085**	**59,326**	**1,712,909**
1974	**TOTAL**	**578,183**	**384,824**	**684,874**	**58,042**	**1,705,923**
1975	January	54,003	32,405	55,505	5,954	147,867
	February	50,219	31,459	54,328	5,544	141,550
	March	47,968	31,194	54,437	5,639	139,238
	April	44,762	30,473	53,910	5,269	134,414
	May	41,077	30,926	54,767	5,404	132,174
	June	45,766	35,210	55,369	5,384	141,729
	July	54,586	38,031	55,645	5,668	153,930
	August	57,291	38,576	57,868	5,709	159,444
	September	54,362	37,325	58,405	5,978	156,070
	October	43,024	32,817	58,815	5,745	140,401
	November	R42,054	R31,608	R58,223	R5,976	R137,861
	December	R50,213	R32,596	R57,433	R5,907	R146,149
	TOTAL	**R585,325**	**R402,620**	**R674,705**	**R68,177**	**R1,730,827**
1976	January	R60,126	R34,955	R57,463	R6,359	R158,903
	February	54,264	33,583	58,228	5,874	151,949
	March	47,060	32,273	60,516	5,990	145,839
	April	43,551	31,598	60,106	5,407	140,662
	May	41,036	32,347	61,271	5,478	140,132
	June	44,157	35,707	62,419	5,344	147,627
	July	54,314	39,455	62,877	5,895	162,541
	August	57,256	39,517	64,184	5,835	166,792
	September	53,460	38,503	64,333	6,134	162,430
	October	44,762	34,388	64,208	5,420	148,778
	November	46,674	33,372	63,106	5,606	148,758
	December	56,750	35,579	62,842	5,626	160,797
	TOTAL	**R603,410**	**R421,277**	**R741,553**	**R68,968**	**R1,835,208**
1977	January	R65,280	R37,362	R61,638	R6,006	R170,286
	February	61,705	37,945	59,493	6,083	165,226
	March	52,686	36,222	62,043	5,936	156,887
	April	47,736	35,341	62,004	5,752	150,833
	TOTAL (4 months)	**227,407**	**146,870**	**245,178**	**23,777**	**643,232**

Total Sales



*Includes street lighting and trolley cars.
R=Revised.
Sources: 1972 through January 1977—Federal Power Commission Form 5; February 1977 forward—Edison Electric Institute.

Cooling Degree-Days*

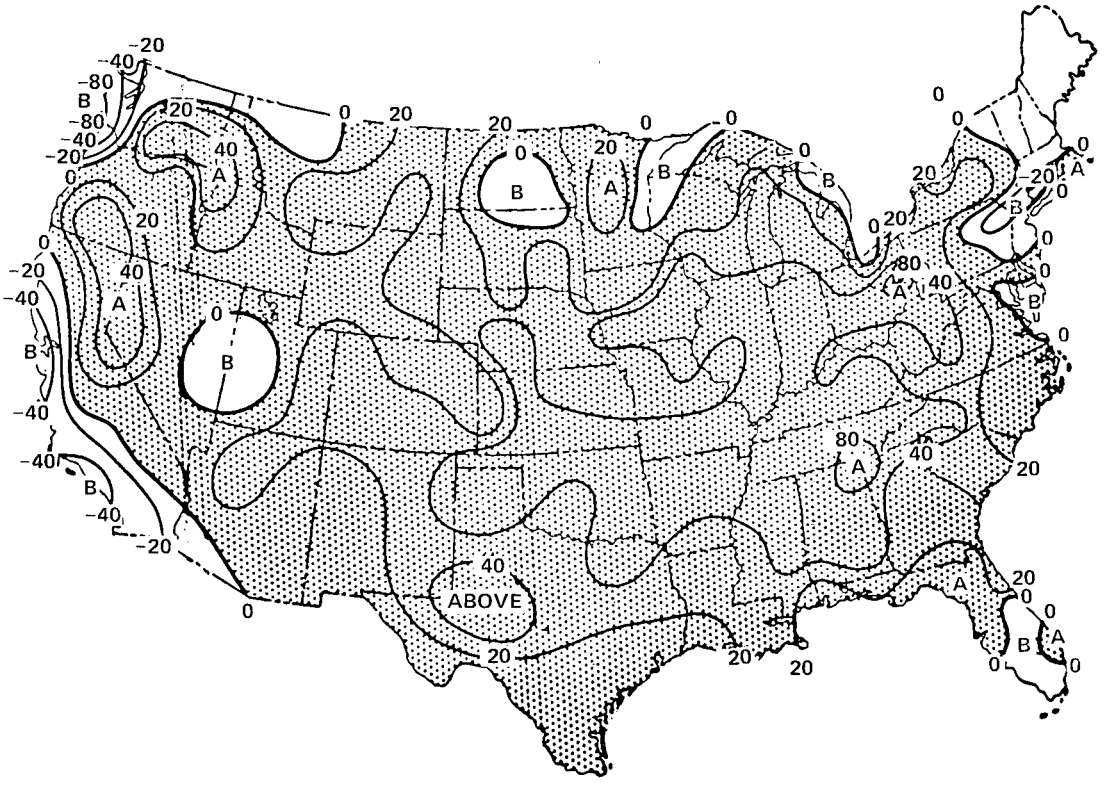
Petroleum Administration for Defense (PAD) Districts	July 4 thru July 31, 1977				Cumulative Since January 1			
	1977	1976**		Normal (1941-70)**	1977	1976**		Normal (1941-70)**
PAD District I	351.7	286.4	(22.8)	313.0 (12.4)	800.2	760.7	(5.2)	731.0 (9.5)
New England Conn., Maine, Mass., N.H., R.I., Vt.	241.6	188.3	(28.3)	213.8 (13.0)	447.4	493.0	(-9.3)	345.2 (29.6)
Middle Atlantic Del., Md., N.J., N.Y., Pa.	310.6	239.2	(29.8)	285.8 (8.7)	574.2	593.0	(-3.2)	537.7 (6.8)
Lower Atlantic Fla., Ga., N.C., S.C., Va., W. Va.	461.7	400.3	(15.3)	397.2 (16.2)	1,295.0	1,130.5	(14.6)	1,190.9 (8.7)
PAD District II Ill., Ind., Iowa, Kans., Ky., Mich., Minn., Mo., Nebr., N. Dak., Ohio, Okla., S. Dak., Tenn., Wisc.	363.2	295.9	(22.7)	275.7 (31.7)	781.1	561.5	(39.1)	580.6 (34.5)
PAD District III Ala., Ark., La., Miss., N. Mex., Tex.	522.5	428.4	(22.0)	491.0 (6.4)	1,497.6	1,162.3	(28.9)	1,412.0 (6.1)
PAD District IV Colo., Idaho, Mont., Utah, Wyo.	257.5	291.7	(-11.7)	248.9 (3.4)	499.9	424.4	(17.8)	389.5 (28.3)
PAD District V Ariz., Calif., Nev., Oreg., Wash.	199.6	203.9	(-2.1)	192.5 (3.7)	425.6	476.0	(-10.6)	413.6 (2.9)
U.S. AVERAGE	**351.9**	**295.0**	**(19.3)**	**303.5 (15.9)**	**816.6**	**695.3**	**(17.4)**	**709.9 (15.0)**

*See Explanatory Note 9 for explanation of cooling degree-days.
**Percentage change in parentheses.

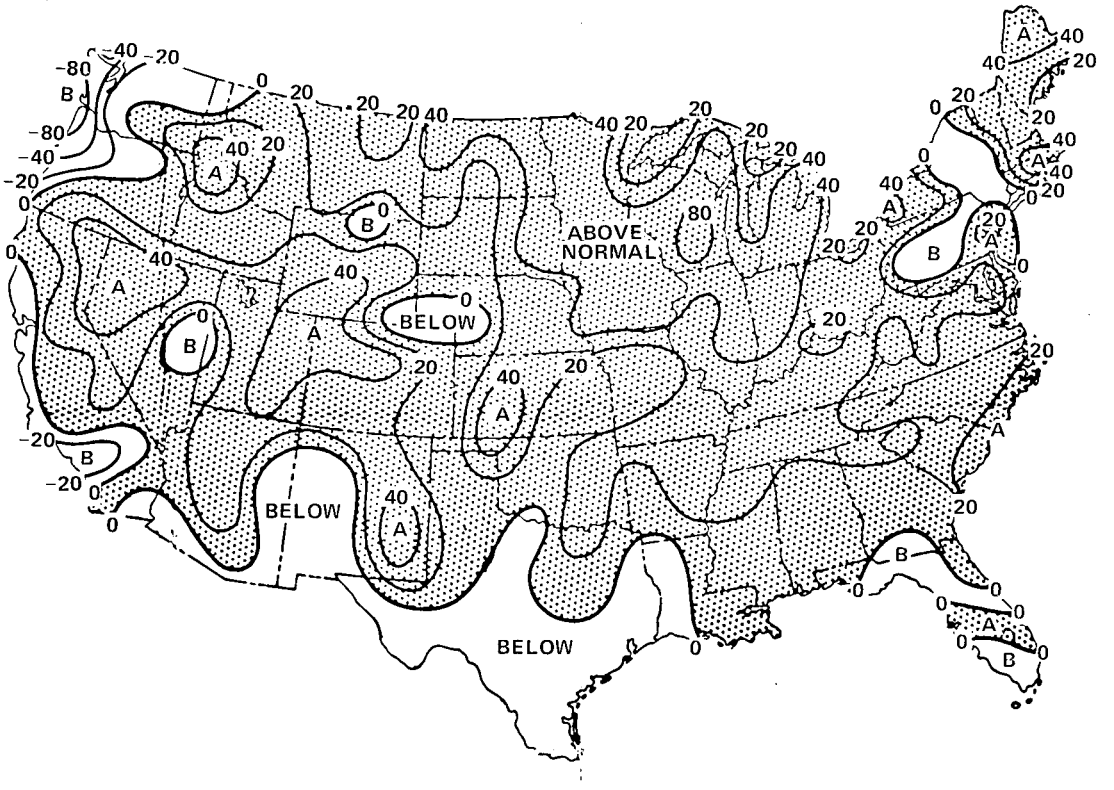
Cooling Degree-Days (Continued)

Cooling Degree-Days Accumulated from January 1, 1977 through July 31, 1977

Percent Departure from 1976



Percent Departure from Normal (1941-70)



Note: Above normal cooling degree-days correspond to above normal temperatures.
Source: Department of Commerce—NOAA.

Nuclear Power

The 61 domestic reactors in commercial operation, with a maximum dependable capacity of 43,108 electrical megawatts, performed at 67 percent of capacity during June. Electricity generation from all nuclear powerplants amounted to 11.8 percent of the Nation's total electricity production for the month.

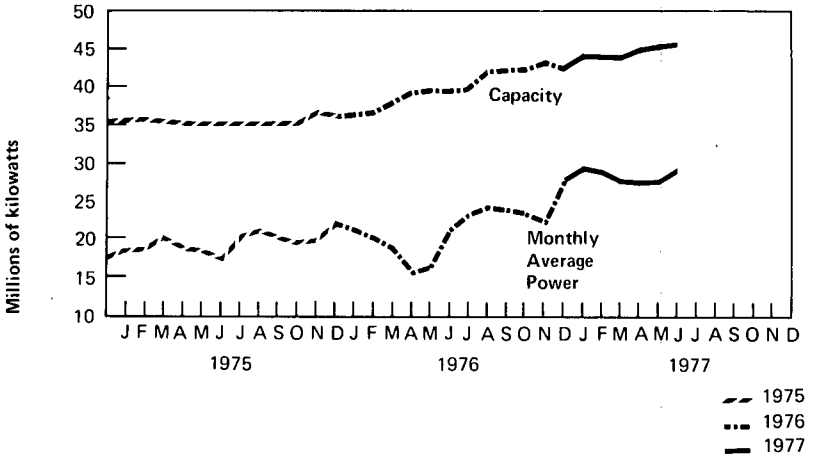
Nuclear reactor performance during the first half of 1977 averaged 64 percent of maximum dependable capacity with a constant average power level of 28,530 electrical megawatts. This was a considerable improvement over the January-June period of 1976, when reactors operated at 49 percent of capacity at an average power level of 19,016 megawatts. Nuclear reactors contributed 12.0 percent of total domestic electricity generation during the first half the year compared with 8.8 and 8.5 percent for the same period in 1975 and 1976, respectively.

Salem 1, a 1,090-megawatt pressurized water reactor (PWR), achieved commercial operation status in late June. The reactor is the first operating nuclear unit of Public Service Electric and Gas Company of New Jersey and is located 20 miles south of Wilmington, Delaware. Farley 1, an 829-megawatt PWR owned by Alabama Power Company and under construction since 1971, was granted an operating license by the Nuclear Regulatory Commission to begin start-up testing in June, 2 1/2 years behind schedule. Alabama Power attributed most of this slippage to design modifications and late delivery of materials and equipment.

U.S. Nuclear Powerplant Operations*

		Maximum Dependable Capacity	Average Power	Percent of Total Domestic Electricity Generation
		Thousands of net kilowatts		
1972	**AVERAGE**	**7,726**	**6,174**	**3.1**
1973	**AVERAGE**	**13,850**	**8,760**	**4.5**
1974	**AVERAGE**	**29,921**	**13,011**	**6.1**
1975	January	35,691	18,734	8.5
	February	35,899	18,948	8.7
	March	35,686	20,003	9.6
	April	35,017	18,510	9.1
	May	35,017	18,500	9.0
	June	35,322	17,701	7.8
	July	35,596	20,661	8.7
	August	35,589	21,344	8.8
	September	35,540	19,994	9.3
	October	35,540	19,659	9.4
	November	36,752	19,672	9.3
	December	36,424	22,418	9.9
	AVERAGE	**35,671**	**19,692**	**9.0**
1976	January	36,750	21,638	9.0
	February	36,879	20,657	9.2
	March	38,072	18,808	8.5
	April	39,763	15,142	7.2
	May	39,902	16,034	7.6
	June	39,781	21,885	9.1
	July	40,168	23,802	9.5
	August	42,067	24,681	9.8
	September	42,896	24,014	10.5
	October	42,877	23,327	10.6
	November	43,673	22,408	9.5
	December	42,877	28,380	11.5
	AVERAGE	**40,642**	**21,756**	**9.4**
1977	January	44,316	29,558	11.2
	February	44,282	29,054	12.0
	March	44,289	27,727	12.2
	April	45,131	R27,584	R12.7
	May	**45,222	R**27,815	R**12.1
	June	**45,991	**29,489	**11.8
	AVERAGE (6 months)	**44,874**	**28,530**	**12.0**

U.S. Nuclear Powerplants



*Includes all units licensed to operate, whether in commercial operation or power ascension status.
**Preliminary data.
R=Revised data.
Sources: Average Power for latest 2 months and Capacity are from U.S. Nuclear Regulatory Commission; Percent of Total Domestic Electricity Generation for latest 2 months is based on data from Edison Electric Institute; remaining data are from Federal Power Commision Form 4.

Status of Nuclear Powerplants – June 30, 1977

Status	Number of Plants					Design Capacity
	Boiling Water Reactors	High Temperature Gas Reactors	Pressurized Water Reactors	Other*	Total	Net Electrical Megawatts
Licensed to operate	25	1	39	0	65	47,000
Construction permit granted	27	0	50	0	77	82,000
Construction permit pending	13	0	43	4	60	67,000
Orders placed for plant	3	0	6	0	9	11,000
Publicly announced	–	–	–	19	19	23,000
TOTAL	**68**	**1**	**138**	**23**	**230**	**230,000**

*Includes 1 Liquid Metal Fast Breeder Reactor and 22 announced intentions to order for which a reactor type has not been chosen.
Source: U.S. Nuclear Regulatory Commission.

U.S. Uranium Enrichment – June 1977

	Domestic Customers	Foreign Customers	Total
Separative work performed (in metric tons of separative work units)	439.630	132.420	572.050
Cost (in millions of dollars)	30.012	9.236	39.248
Product quantity (in metric tons of uranium)	128.221	35.452	163.673
Feed requirement (in metric tons of uranium)	630.795	175.114	805.909

Source: U.S. Energy Research and Development Administration.

Nuclear Power Generation by Major Non-Communist Countries – June 1977

Country	Number of Reactors*	Capacity	Generation of Electricity				
			Generation	Percent of Design Capacity			
			June	June	Year**		
					1974	1975	1976
		Thousands of gross electrical kilowatts	Millions of gross kilowatt hours				
Canada	7	3,980	1,972	69	74	64	85
Federal Republic of Germany	10	6,410	3,295	71	57	72	68
France	11	3,970	1,182	41	57	68	58
Great Britain	***31	8,100	3,235	46	61	57	64
India	3	620	312	70	55	46	58
Italy	3	630	156	34	61	69	69
Japan	13	7,430	1,820	34	61	36	57
Spain	3	1,120	382	48	75	77	77
Sweden	6	3,880	1,124	40	20	44	55
Switzerland	3	1,060	475	62	76	84	86
United States	64	46,230	22,340	66	57	60	56
TOTAL	**154**	**84,430**	**36,293**	**59**	**58**	**58**	**60**

*Includes only operational units, i.e., those which have generated electricity during, or prior to, the current month.
**Averages are computed for those units in operation on January 1 of each year.
***Figures for 16 units are based on 5-week period; figures for remaining units are for 30 days.
Source: *Nucleonics Week.*

Summary of Monthly Fuel Cycle – May 1977

Fuel Cycle Activity	Product	Processed Material*	Percent Utilization of Industry Capacity	Energy Content of Processed Material**	Energy Consumed in Fuel Cycle Activity***	Cost Contribution to Electric Power†
		MTU except where noted		Billion Btu		Mills per kilowatt hour
Milling	Yellowcake (U_3O_8) Deliveries	854	81	293,000	486	1.27
Conversion	Uranium Hexafluoride (UF_6) Deliveries	1,414	98	492,000	304	0.16
Enrichment	Enriched UF_6 Deliveries	167 (682 MT-SWU)	††	505,000	5,908	1.53
Fabrication	Finished Fuel Assemblies Shipped	77	31	14,000	11	0.47
Powerplant Operation	Electricity Generated	20,695 (million kWhe)	64	221,000	1,088 (million kWhe)	10.93
	Spent Fuel Discharged	0	–	–	–	
Reprocessing	Spent Fuel Received	3	–	–	–	††† 1.57
	Spent Fuel Reprocessed	0	–	–	–	

*Units of measure are discussed in Explanatory Notes 10 and 11.
**Assumes 25,000 MWD/MTU for heat content of enriched uranium and a 6.1 feed to product ratio at the enrichment plant.
***Energy requirements for processing are obtained from U.S.A.E.C. Report No. WASH 1248.
†Cost contribution is computed from unit prices paid for current month's production and requirement for a model 1000 MWe reactor operating at 65 percent capacity factor. Because of the long lead time required for nuclear fuel processing, the sum of numbers in this column does not necessarily reflect the fuel cost of current electricity production.
††ERDA's enrichment plants are presently operating at maximum utilization of available electric power, with the excess production being placed in the "Preproduction stockpile" in anticipation of high demand for enriched uranium in the 1980's.
†††Figure represents current industry estimate for cost of spent fuel shipment, reprocessing, and waste disposition, exclusive of cost credits for recovered uranium and plutonium.
NA=Not available.
Source: ERDA.

Energy Consumption

Domestic energy consumption in May 1977 was 5.78 quadrillion Btu, 2.2 percent more than during May 1976, and 7.6 percent more than in May 1975. The sectoral breakout for May is not yet available.

In April 1977, the combined residential/commercial sector consumed 2.13 quadrillion Btu, which was 0.8 percent more than in April 1976 but 7.5 percent less than in April 1975.

Industrial energy consumption in April was 2.08 quadrillion Btu, which was 2.2 percent more than in April 1976 and 11.8 percent more than in April 1975. Industrial natural gas consumption for the month was 0.55 quadrillion Btu, 6.4 percent less than in April 1976.

Transportation consumption for April 1977 totaled 1.63 quadrillion Btu, 2.8 percent more than in April 1976 and 6.8 percent more than in April 1975.

Petroleum Consumption and Forecast

Total domestic demand for petroleum products during the second quarter of 1977 was 17.4 million barrels per day. This was 1.4 percent above the forecast level and 5.7 percent above demand for the second quarter of 1976.

The largest increase was in residual fuel oil demand which was 2.8 million barrels per day, 5.3 percent above the forecast level and 13.4 percent above demand in the second quarter of 1976. Demand for distillate fuel oil was 2.8 million barrels per day, 0.6 percent above the forecast level and 7.4 percent above demand during the second quarter of 1976. Domestic demand for motor gasoline in the second quarter was 7.3 million barrels per day. This was 1.5 percent below the forecast level but 1.4 percent above the level for the same quarter in 1976.

Energy Consumption

Domestic Energy Consumption by Primary Energy Type

		Coal*	Natural Gas (dry)	Petroleum	Hydroelectric Power**	Nuclear Electric Power	Total	Cumulative Total
				Quadrillion (10^{15}) Btu				
1972	**TOTAL**	**12.424**	**22.984**	**32.965**	**2.946**	**0.567**	**71.895**	
1973	**TOTAL**	**13.294**	**22.512**	**34.852**	**3.006**	**0.888**	**74.553**	
1974	**TOTAL**	**12.889**	**21.732**	**33.468**	**3.295**	**1.215**	**72.600**	
1975	January	1.148	2.295	3.067	0.268	0.149	6.927	6.927
	February	1.054	1.980	2.629	0.256	0.136	6.054	12.982
	March	1.087	1.943	2.780	0.299	0.159	6.267	19.249
	April	1.004	1.608	2.646	0.285	0.142	5.685	24.934
	May	0.984	1.359	2.582	0.296	0.147	5.368	30.301
	June	1.032	1.283	2.574	0.290	0.136	5.315	35.616
	July	1.091	1.341	2.682	0.273	0.164	5.550	41.167
	August	1.131	1.398	2.693	0.243	0.169	5.634	46.800
	September	1.015	1.399	2.600	0.221	0.153	5.388	52.188
	October	1.035	1.576	2.790	0.243	0.156	5.801	57.989
	November	1.059	1.674	2.601	0.262	0.151	5.747	63.736
	December	1.174	2.092	3.098	0.278	0.178	6.821	70.557
	TOTAL	**12.813**	**19.948**	**32.742**	**3.215**	**1.839**	**70.557**	
1976	January	1.218	R2.336	3.169	0.279	0.172	R7.173	R7.173
	February	1.078	R1.976	2.778	0.263	0.153	R6.247	R13.421
	March	1.119	R1.753	2.947	0.284	0.149	R6.252	R19.673
	April	1.070	R1.537	2.749	0.259	0.117	R5.731	R25.404
	May	1.072	R1.461	2.722	0.273	0.127	R5.655	R31.059
	June	1.115	R1.359	2.776	0.273	0.168	R5.692	R36.751
	July	1.188	R1.398	2.830	0.279	0.189	R5.883	R42.634
	August	1.197	R1.341	2.835	0.256	0.196	R5.824	R48.458
	September	1.099	R1.325	2.774	0.220	0.184	R5.602	R54.060
	October	1.134	R1.652	2.905	0.227	0.185	R6.103	R60.163
	November	1.182	R1.910	3.107	0.214	0.172	R6.585	R66.748
	December	1.281	R2.276	3.494	0.218	0.225	R7.493	R74.242
	TOTAL	**13.752**	**R20.323**	**35.087**	**3.043**	**2.037**	**R74.242**	
1977	January	1.312	R2.444	R3.489	0.223	0.236	R7.704	R7.704
	February	1.169	R1.834	R3.143	0.165	0.209	R6.520	R14.224
	March	1.157	R1.722	R3.076	0.214	0.220	R6.390	R20.614
	April	R1.080	R1.450	R2.893	R0.201	R0.211	R5.836	R26.450
	May***	1.083	1.358	2.909	0.208	0.221	5.778	32.228
	TOTAL (5 months)	**5.801**	**8.808**	**15.511**	**1.012**	**1.097**	**32.228**	

*Includes bituminous coal, lignite, and anthracite coal.
**Includes utility production, industrial production, and net imports.
***Partially estimated.
Source: FEA.

Energy Consumption by Economic Sector and Primary Source – April 1977 [Quadrillion (10^{15}) Btu]

Sector[1]	Primary Energy Source					Primary Energy Consumption	Electricity Distributed[7]	Net Energy Consumption	Electrical Energy Loss Distributed[8]	Ultimate Energy Disposition
	Coal[2]	Natural Gas (dry)[3]	Petroleum[4]	Hydroelectric[5]	Nuclear[6]					
Residential and Commercial	0.021	0.623	0.537	–	–	1.181	0.298	1.479	0.651	2.130
Industrial	0.327	0.554	0.522	0.003	–	1.407	0.212	1.618	0.462	2.080
Transportation	0.001	0.044	1.565	–	([9])	1.610	0.005	1.615	0.011	1.626
Electric Utilities	0.732	0.228	0.268	0.198	0.211	1.638	–	–	–	–
TOTAL	**1.080**	**1.450**	**2.893**	**0.201**	**0.211**	**5.836**	**0.515**	**4.712**	**1.123**	**5.836**

[1] See Explanatory Note 12 for definitions of the Residential and Commercial, Industrial, Transportation, and Electric Utilities Sectors.
[2] Data are from the Bureau of Mines. Includes anthracite and bituminous coal and lignite.
[3] Aggregate data are from the Bureau of Mines. FPC provided data on natural gas consumed by electric utilities. Data from the American Gas Association are used for the Residential and Commercial Sector, adjusted to include a portion of the AGA "Other" category. Natural gas used in transportation, mostly for pipeline use, is estimated to be 3.6 percent of total natural gas consumption less electric utilities. This percentage is derived from 1974, 1975, and 1976 Bureau of Mines data on consumption. The Industrial Sector is then the difference between the total and the sum of the other sectors.
[4] Aggregate petroleum data are from the Bureau of Mines. FPC provided data on oil consumed by electric utilities. Petroleum consumed in transportation was calculated based on Department of Transportation data as follows: Motor gasoline - 100 percent; naphtha jet fuel - 100 percent; kerosene jet fuel - 97 percent; distillate fuel oil - 30.3 percent; residual fuel oil - 11.2 percent; all other products - 4.7 percent. The remainder is distributed to economic sectors using the following percentage shares, derived from 1974, 1975, and 1976 Bureau of Mines data on consumption; Residential and Commercial - 50.7 percent; Industrial - 49.3 percent.
[5] FPC hydroelectric power production plus net imports of electricity. These imports are assumed to be from hydroelectric power sources and are estimated at 0.011 quadrillion Btu per month in 1974 and 0.005 quadrillion Btu per month for 1975 and 1976. Monthly industrial hydroelectric power consumption is estimated to be one-twelfth of the preliminary Bureau of Mines annual figure for 1976.
[6] FPC nuclear power production.
[7] Electricity was distributed using Edison Electric Institute data on kilowatt-hour sales to ultimate customers. Electrical energy consumed by railroads and for street and highway lighting was distributed to the Transportation Sector. All "Other" sales, largely for use in government buildings, were distributed to the Residential and Commercial Sector.
[8] In generating electricity with nuclear or fossil fuels, approximately 65 percent of the energy is lost in the form of heat. Transmission and distribution losses consume about an additional 3 percent of the energy inputs of the utility industry. In order to fully account for all energy consumed both directly and indirectly (i.e., ultimate energy disposition), the electricity losses are allocated to the final end-use sectors in proportion to their direct kilowatt-hour usage.
[9] Negligible.

Energy Consumption (Continued)

Percent Changes in Energy Consumption for April 1977 by Sources and Economic Sectors

	April 1977 Consumption	Percent Change from April 1976*	Cumulative Percent Change from 1976 (January through April)*
	Quadrillion Btu		
Refined Petroleum Products	2.893	+5.2	+9.1
Motor Gasoline	1.155	+2.5	+3.4
Jet Fuel	0.173	+1.7	+7.0
Distillate	0.520	+6.8	+14.7
Residual	0.540	+14.6	+18.0
Other Petroleum Products	0.505	+3.8	+7.9
Natural Gas (Dry)	1.450	-5.6	-1.2
Coal (Anthracite, bituminous, and lignite)	1.080	+1.0	+6.1
Hydroelectric and Nuclear Electric Power	0.515	+7.2	+8.6
TOTAL ENERGY USE	5.836	+1.8	+5.0
Economic Sector Consumption			
Residential and Commercial	2.130	+2.7	+8.5
Industrial	2.080	+0.2	+0.5
Transportation	1.626	+2.9	+5.5

*Computed on a daily average basis.

Energy Consumption by the Residential and Commercial Economic Sector[1]

		Coal	Natural Gas (dry)	Petroleum[2]	Electricity Distributed	Electrical Energy Loss Distributed	Total Energy Use	Cumulative Total Energy Use
					Quadrillion (10^{15}) Btu			
1973	**TOTAL**	**0.295**	**7.577**	**7.077**	**3.445**	**8.120**	**26.515**	
1974	**TOTAL**	**0.297**	**7.427**	**6.688**	**3.424**	**8.222**	**26.058**	
1975	January	0.035	1.124	0.627	0.310	0.748	2.845	2.845
	February	0.023	1.105	0.526	0.292	0.637	2.583	5.427
	March	0.022	1.018	0.546	0.284	0.684	2.554	7.981
	April	0.015	0.905	0.489	0.270	0.623	2.302	10.283
	May	0.012	0.522	0.444	0.259	0.660	1.897	12.180
	June	0.013	0.338	0.435	0.290	0.735	1.811	13.991
	July	0.016	0.294	0.463	0.331	0.844	1.947	15.938
	August	0.015	0.267	0.447	0.342	0.855	1.925	17.863
	September	0.021	R0.284	0.484	0.328	0.673	R1.789	R19.652
	October	0.023	R0.375	0.539	0.273	0.650	R1.860	R21.513
	November	0.024	R0.526	0.503	R0.266	R0.936	R2.255	R23.767
	December	0.033	R0.930	0.635	R0.297	R0.754	R2.649	R26.417
	TOTAL	**0.255**	**R7.688**	**6.135**	**R3.541**	**R8.797**	**R26.417**	
1976	January	0.031	R1.232	0.656	0.340	0.832	R3.091	R3.091
	February	0.020	R1.086	0.575	0.314	0.678	R2.673	R5.764
	March	0.018	R0.854	0.571	0.286	0.695	R2.423	R8.187
	April	0.021	R0.664	0.500	0.270	0.619	R2.074	R10.261
	May	0.016	0.510	0.506	0.264	0.636	1.932	R12.193
	June	0.015	0.369	0.489	0.286	0.745	1.904	R14.097
	July	0.011	0.297	0.487	0.335	0.852	1.983	R16.080
	August	0.015	0.275	0.506	0.345	0.845	1.986	R18.066
	September	0.017	0.271	0.517	0.329	0.700	1.835	R19.901
	October	0.020	0.397	0.567	0.283	0.675	1.942	R21.843
	November	0.025	0.700	0.622	R0.287	R0.704	R2.338	R24.180
	December	0.037	1.078	0.726	R0.328	R0.815	R2.985	R27.165
	TOTAL	**0.246**	**R7.733**	**6.722**	**R3.668**	**R8.796**	**R27.165**	
1977	January	0.036	1.353	0.712	R0.365	R0.933	R3.398	R3.398
	February	0.025	1.220	R0.674	0.355	R0.716	R2.990	R6.388
	March	0.019	0.849	0.605	0.318	0.736	2.527	R8.915
	April	0.021	0.623	0.537	0.298	0.651	2.130	11.045
	TOTAL	**0.101**	**4.044**	**2.528**	**1.336**	**3.036**	**11.045**	

(See footnotes on page 49)

Energy Consumption (Continued)

Energy Consumption by the Industrial Economic Sector[1]

		Coal	Natural Gas (dry)	Petroleum[3]	Hydro-electric	Electricity Distributed	Electrical Energy Loss Distributed	Total Energy Use	Cumulative Total Energy Use
		Quadrillion (10^{15}) Btu							
1973	**TOTAL**	**4.370**	**10.493**	**6.403**	**0.036**	**2.341**	**5.518**	**29.161**	
1974	**TOTAL**	**4.062**	**10.156**	**6.100**	**0.036**	**2.337**	**5.609**	**28.299**	
1975	January	0.341	0.887	0.610	0.003	0.189	0.458	2.489	2.489
	February	0.342	0.619	0.511	0.003	0.185	0.404	2.064	4.553
	March	0.362	0.648	0.531	0.003	0.186	0.447	2.176	6.729
	April	0.340	0.433	0.475	0.003	0.184	0.425	1.861	8.590
	May	0.321	0.516	0.431	0.003	0.187	0.475	1.934	10.523
	June	0.299	0.595	0.423	0.003	0.189	0.478	1.987	12.510
	July	0.286	0.640	0.450	0.003	0.190	0.485	2.053	14.563
	August	0.291	0.724	0.435	0.003	0.197	0.494	2.144	16.707
	September	0.292	R0.752	0.470	0.003	0.199	0.408	R2.125	R18.832
	October	0.303	R0.872	0.524	0.003	0.201	0.478	R2.380	R21.212
	November	0.316	R0.349	0.489	0.003	R0.199	R0.699	R2.054	R23.266
	December	0.334	R0.875	0.617	0.003	R0.196	R0.498	R2.523	R25.788
	TOTAL	**3.826**	**R7.910**	**5.966**	**0.035**	**R2.302**	**R5.749**	**R25.788**	
1976	January	0.320	R0.816	0.638	0.003	0.196	0.480	2.453	2.453
	February	0.302	R0.622	0.559	0.003	0.199	0.429	R2.113	R4.566
	March	0.321	R0.616	0.555	0.003	0.206	0.502	R2.203	R6.769
	April	0.320	R0.592	0.487	0.003	0.205	0.471	R2.077	R8.846
	May	0.327	R0.635	0.492	0.003	0.209	0.504	R2.170	R11.016
	June	0.312	R0.631	0.475	0.003	0.213	0.554	R2.188	R13.204
	July	0.310	R0.717	0.473	0.003	0.215	0.546	R2.263	R15.467
	August	0.304	R0.691	0.492	0.003	0.219	0.537	R2.246	R17.713
	September	0.303	R0.715	0.503	0.003	0.220	0.466	R2.209	R19.922
	October	0.318	R0.948	0.551	0.003	0.219	0.522	R2.562	R22.483
	November	0.327	R0.927	0.605	0.003	R0.215	R0.529	R2.606	R25.089
	December	0.357	R0.904	0.706	0.003	R0.214	R0.532	R2.716	R27.805
	TOTAL	**3.821**	**R8.813**	**6.537**	**0.033**	**R2.530**	**R6.071**	**R27.805**	
1977	January	0.338	R0.801	R0.693	0.003	R0.210	R0.538	R2.583	R2.583
	February	0.330	R0.350	R0.655	0.003	0.203	0.410	R1.950	R4.533
	March	0.331	R0.583	0.588	0.003	0.212	0.489	R2.205	R6.738
	April	0.327	0.554	0.522	0.003	0.212	0.462	2.080	8.818
	TOTAL	**1.326**	**2.288**	**2.458**	**0.011**	**0.837**	**1.899**	**8.818**	

(See footnotes on page 49)

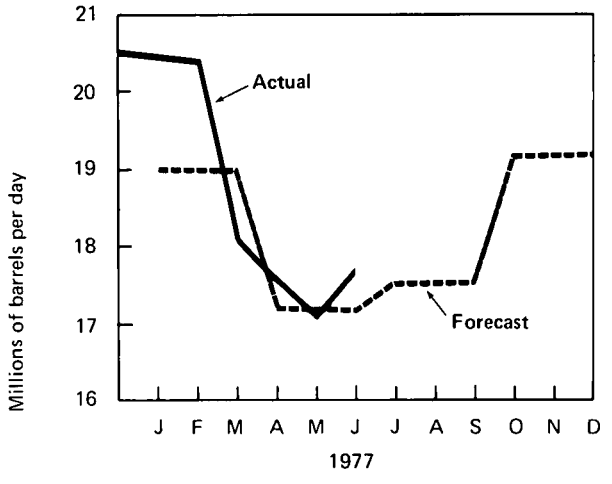
Energy Consumption by the Transportation Economic Sector[1]

		Coal	Natural Gas[4] (dry)	Petroleum	Electricity Distributed	Electrical Energy Loss Distributed	Total Energy Use	Cumulative Total Energy Use
				Quadrillion (10^{15}) Btu				
1973	**TOTAL**	**0.009**	**0.733**	**17.940**	**0.058**	**0.137**	**18.877**	
1974	**TOTAL**	**0.009**	**0.638**	**17.392**	**0.060**	**0.144**	**18.242**	
1975	January	0.001	0.075	1.499	0.006	0.013	1.594	1.594
	February	0.001	0.064	1.325	0.005	0.012	1.408	3.002
	March	0.001	0.062	1.456	0.005	0.013	1.537	4.538
	April	0.001	0.050	1.455	0.005	0.012	1.523	6.061
	May	0.001	0.039	1.481	0.005	0.012	1.537	7.598
	June	0.001	0.035	1.465	0.005	0.012	1.517	9.115
	July	0.001	0.035	1.497	0.005	0.012	1.550	10.665
	August	0.001	0.037	1.510	0.005	0.012	1.564	12.230
	September	0.001	0.039	1.419	0.005	0.010	1.474	13.704
	October	0.001	0.047	1.495	0.005	0.013	1.561	15.264
	November	0.001	R0.033	1.380	0.006	R0.020	R1.439	R16.703
	December	0.001	0.067	1.560	0.006	0.015	1.649	R18.352
	TOTAL	**0.008**	**R0.582**	**17.544**	**0.062**	**R0.155**	**R18.352**	
1976	January	0.001	0.076	1.532	0.006	R0.014	1.629	1.629
	February	0.001	0.064	1.380	0.006	0.012	R1.462	R3.091
	March	0.001	0.055	1.552	0.005	0.013	1.626	R4.717
	April	0.001	0.047	1.516	0.005	0.012	R1.581	R6.297
	May	0.001	0.043	1.493	0.005	0.012	1.553	R7.851
	June	0.001	0.037	1.545	0.005	0.012	R1.600	R9.450
	July	0.001	0.038	1.581	0.005	0.012	1.637	R11.087
	August	0.001	0.036	1.538	0.005	0.013	1.592	R12.680
	September	0.001	0.037	1.504	0.005	0.011	1.558	R14.237
	October	0.001	0.050	1.530	0.006	0.013	1.599	R15.837
	November	0.001	0.061	1.561	0.006	0.014	R1.642	R17.479
	December	0.001	0.074	1.697	0.006	0.014	1.792	R19.271
	TOTAL	**0.008**	**R0.618**	**18.428**	**0.064**	**0.153**	**R19.271**	
1977	January	0.001	R0.080	R1.620	0.006	0.016	R1.723	R1.723
	February	0.001	0.059	1.503	0.006	0.012	1.580	R3.303
	March	0.001	R0.053	R1.586	0.005	0.012	R1.657	R4.960
	April	0.001	0.044	1.565	0.005	0.011	1.626	6.586
	TOTAL	**0.002**	**0.236**	**6.275**	**0.022**	**0.050**	**6.586**	

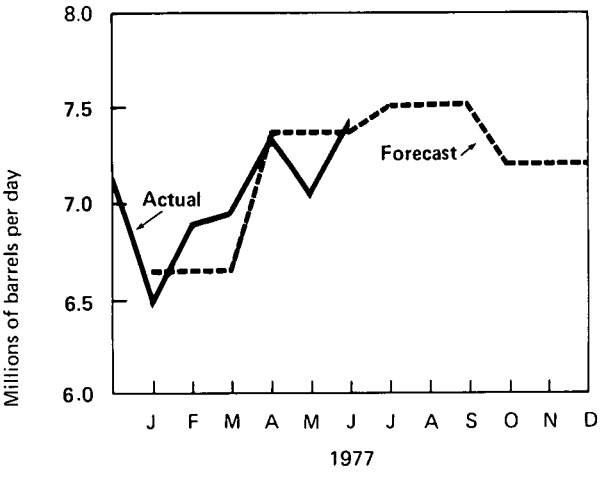
[1] See Explanatory Note 12 for definitions of the Residential and Commercial, Industrial, and Transportation Sectors. The methodology used for sector calculations is provided in the footnotes of the previous table. Printed totals may differ slightly from the sum of their row/column components due to independent rounding.
[2] The percentage share used in calculating Residential and Commercial consumption of petroleum was 52.5 percent for 1973 and 50.7 percent for 1974, 1975, 1976, and 1977.
[3] The percentage share used in calculating Industrial consumption of petroleum was 47.5 percent for 1973 and 49.3 percent for 1974, 1975, 1976, and 1977.
[4] The percentage share used in calculating Transportation consumption of natural gas was 3.9 percent for 1973 and 3.6 percent for 1974, 1975, 1976, and 1977.
R=Revised data.

Petroleum Consumption and Forecast

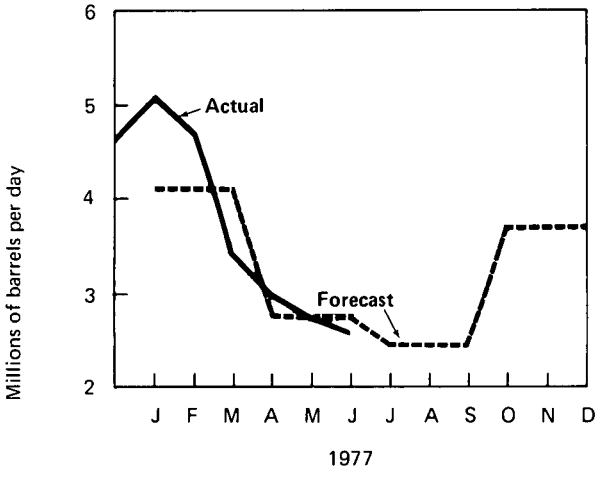
Total Domestic Demand for Petroleum Products



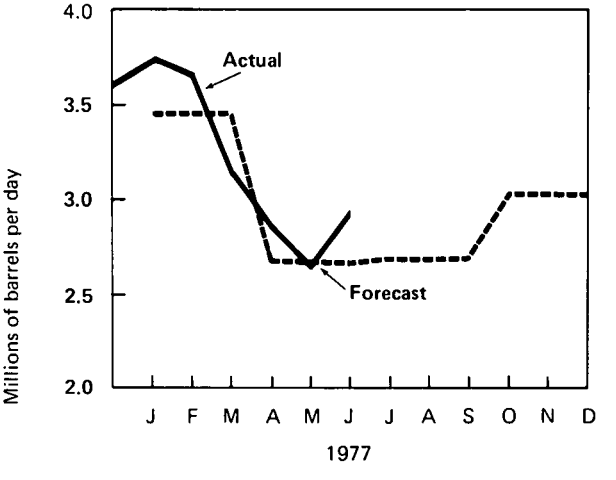
Domestic Demand for Motor Gasoline



Domestic Demand for Distillate Fuel Oil



Domestic Demand for Residual Fuel Oil



Notes:

Domestic Demand – Demand for products, in terms of real consumption, is not available; production plus imports plus withdrawals from primary stocks is used as a proxy for consumption. Secondary stocks, not measured by BOM and API, are substantial for some products.

Actuals – Monthly figures are based on Bureau of Mines data for December 1976 and January through March 1977, FEA data for April and May 1977, and API data for June 1977.

Forecast – The FEA forecast is shown for quarterly intervals. See Explanatory Note 5 for discussion of basic assumptions for forecast.

Part 8

Resource Development

Oil and Gas Exploration and Development

The rotary drilling rig count continued to swing upward in July with an average of 2,023 rigs in use. For the January-July 1977 period, the rig count averaged 1,929, an increase of 23 percent from the January-July 1976 level and the highest average for this period since 1959.

The high level of rotary rig activity is reflected in the number of wells completed so far this year. A total of 20,958 exploratory and development wells were drilled during the first half of 1977, up 6 percent from the comparable 1976 level and up 27 percent from the number of wells drilled during the same period in 1975.

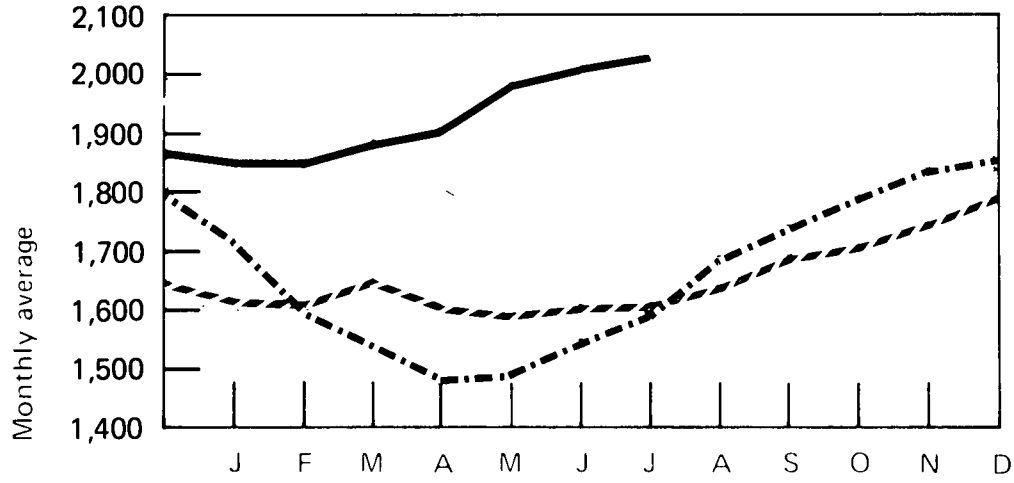
There were 305 crews (274 land, 31 marine) engaged in seismic exploration for oil and gas during June, the highest number since November 1974.

Oil and Gas Exploration and Development

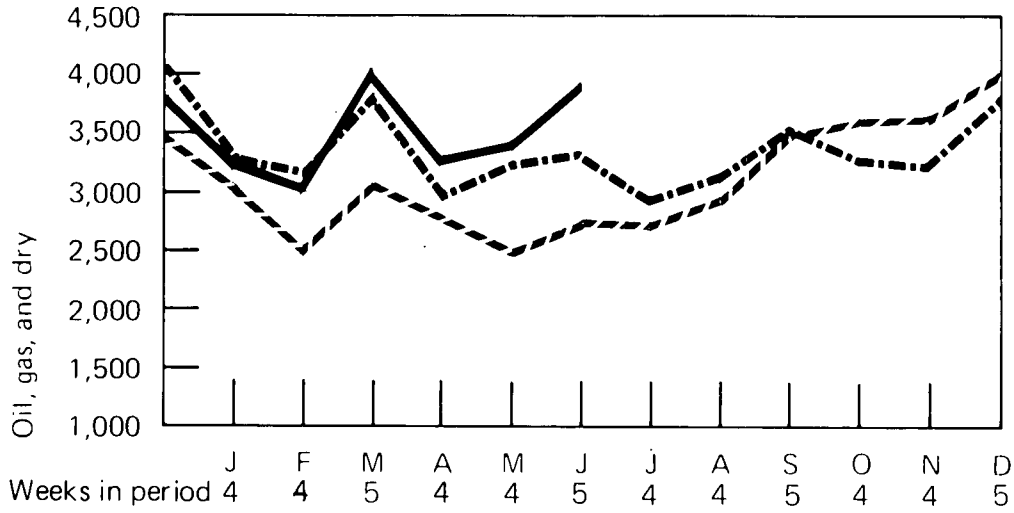
		Rotary Rigs in Operation		Exploratory and Development Wells Drilled*				Total Footage of Wells Drilled
		Monthly average		Oil	Gas	Dry	Total	Thousands of feet
1972	**AVERAGE**	**1,107**	**TOTAL**	**11,306**	**4,928**	**11,057**	**27,291**	**134,602**
1973	**AVERAGE**	**1,194**	**TOTAL**	**9,902**	**6,385**	**10,305**	**26,592**	**136,391**
1974	**AVERAGE**	**1,475**	**TOTAL**	**12,784**	**7,240**	**11,674**	**31,698**	**150,551**
1975	January	1,615		1,299	655	1,040	2,994	13,189
	February	1,611		1,097	458	933	2,488	12,071
	March	1,651		1,341	658	1,091	3,090	15,472
	April	1,604		1,181	506	1,071	2,758	13,545
	May	1,592		1,100	451	891	2,442	12,054
	June	1,613		1,246	509	1,022	2,777	13,540
	July	1,616		1,229	557	920	2,706	12,545
	August	1,645		1,272	587	1,122	2,981	14,221
	September	1,699		1,504	831	1,165	3,500	15,636
	October	1,716		1,633	682	1,310	3,625	16,689
	November	1,757		1,619	776	1,270	3,665	15,788
	December	1,793		1,817	832	1,424	4,073	17,556
	AVERAGE	**1,660**	**TOTAL****	**16,408**	**7,580**	**13,247**	**37,235**	**174,434**
1976	January	1,710		1,465	772	1,055	3,292	14,517
	February	1,594		1,341	652	1,159	3,152	14,888
	March	1,540		1,726	821	1,301	3,848	18,126
	April	1,480		1,237	672	994	2,903	13,765
	May	1,496		1,501	658	1,104	3,263	14,196
	June	1,546		1,500	709	1,123	3,332	14,780
	July	1,597		1,312	730	916	2,958	13,716
	August	1,691		1,265	711	1,140	3,116	14,697
	September	1,744		1,474	909	1,199	3,582	16,777
	October	1,794		1,396	750	1,123	3,269	14,542
	November	1,840		1,291	698	1,222	3,211	14,642
	December	1,860		1,512	926	1,414	3,852	17,093
	AVERAGE	**1,656**	**TOTAL****	**17,059**	**9,085**	**13,621**	**39,765**	**181,780**
1977	January	1,850		1,391	732	1,096	3,219	14,517
	February	1,856		1,321	705	999	3,025	14,443
	March	1,887		1,817	958	1,297	4,072	19,400
	April	1,907		1,405	818	1,059	3,282	15,523
	May	1,982		1,382	877	1,150	3,409	16,702
	June	2,008		1,720	952	1,270	3,942	18,767
	July	2,023		NA	NA	NA	NA	NA
	AVERAGE (7 months)	**1,929**	**TOTAL**** (6 months)	**9,032**	**5,054**	**6,872**	**20,958**	**100,357**

*Excludes service wells and stratigraphic and core tests.
**Totals reflect subsequent data revisions and therefore may not agree with cumulative monthly data.
NA=Not available.
Sources: Rotary Rigs: Hughes Tool Company "Rotary Rigs Running—By State;" Wells: American Petroleum Institute "Monthly Drilling Report" and "Quarterly Review of Drilling Statistics for the United States."

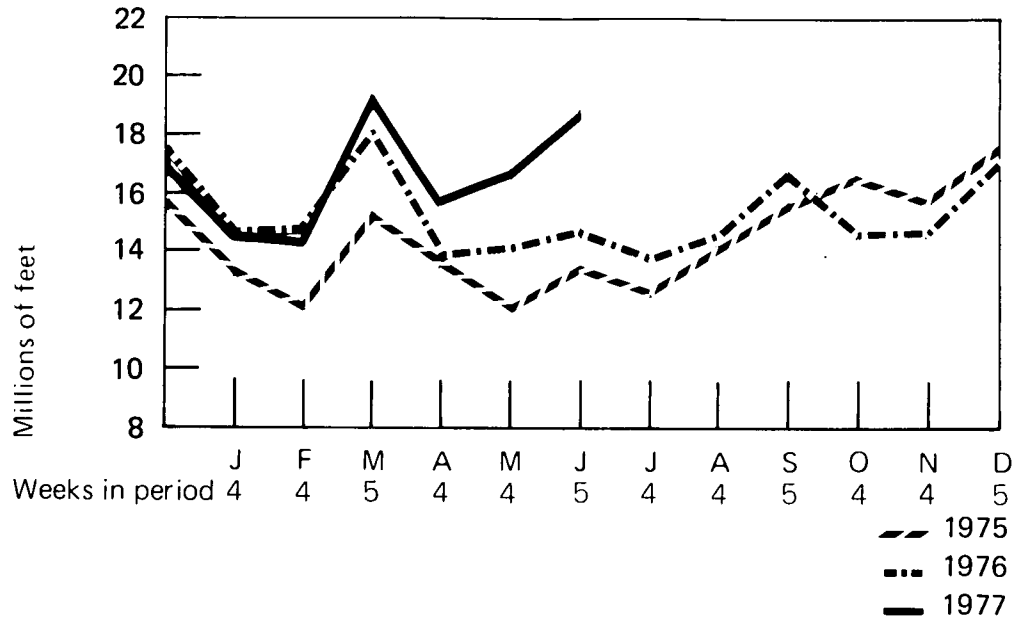
Rotary Rigs in Operation



Total Wells Drilled



Total Footage of Wells Drilled

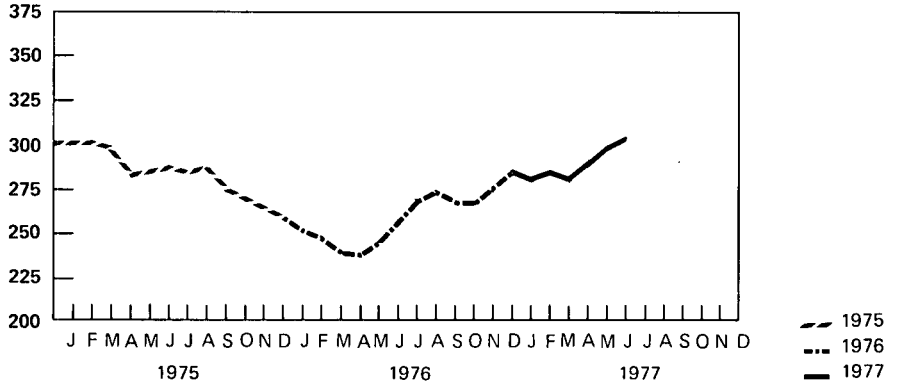


Oil and Gas Exploration and Development (Continued)

		Crews Engaged in Seismic Exploration			Line Miles of Seismic Exploration		
		Offshore	Onshore	Total	Offshore	Onshore	Total
		Monthly average			Monthly average		
1972	**Year**	**12**	**239**	**251**	**10,306**	**9,333**	**19,639**
1973	**Year**	**23**	**227**	**250**	**21,579**	**10,597**	**32,175**
1974	**Year**	**31**	**274**	**305**	**28,482**	**13,219**	**41,701**
1975	**Year**	**30**	**254**	**284**	**25,773**	**12,558**	**38,331**
1976	**Year**	***24**	***237**	***261**	**NA**	**NA**	**NA**
1975	January	27	274	301			
	February	24	278	302			
	March	23	276	299			
	April	23	260	283			
	May	32	254	286			
	June	38	251	289			
	July	37	249	286			
	August	40	249	289			
	September	40	234	274			
	October	29	241	270			
	November	27	238	265			
	December	26	233	259			
1976	January	20	232	252			
	February	17	232	249			
	March	18	222	240			
	April	17	221	238			
	May	21	226	247			
	June	29	229	258			
	July	30	240	270			
	August	33	242	275			
	September	28	240	268			
	October	21	246	267			
	November	25	250	275			
	December	27	259	286			
1977	January	26	254	280			
	February	27	259	286			
	March	22	260	282			
	April	26	266	292			
	May	29	272	301			
	June	31	274	305			
	AVERAGE (6 months)	**27**	**264**	**291**			

*Preliminary.
NA=Not available.
Source: Society of Exploration Geophysicists, "Monthly Seismic Crew Count."

Total Seismic Crews



Motor Gasoline

The national average selling price for regular gasoline at full service retail outlets increased in June by 0.5 cent to 63.4 cents per gallon. The average price that retailers paid for regular gasoline rose 0.3 cent to 53.3 cents per gallon which advanced the dealer margin 0.2 cent to 8.1 cents per gallon. The average self-service retail price for regular gasoline was 59.3 cents per gallon in June, 0.4 cent above the previous month's price.

The average price for unleaded gasoline at full service retail outlets increased 0.5 cent in June to 67.2 cents per gallon. This is 4.3 cents above the price one year ago. Premium gasoline sold for an average of 68.9 cents per gallon in June, an increase of 0.5 cent above the price the month before.

Diesel Fuel

The average price for diesel fuel sold at truckstops was 57.3 cents per gallon in June compared to 57.4 cents per gallon for diesel fuel sold at service stations.

Heating Oil

The average price for heating oil sold to residential customers was 45.7 cents per gallon in May 1977, down 0.2 cent from the price in April. This was the first price decrease since April 1976.

Residual Fuel

The average retail No. 6 residual fuel oil price was 31.4 cents per gallon in May, 1.0 cent below the price in April. This was the second consecutive monthly price decrease since residual prices were decontrolled on June 1, 1976.

Crude Oil

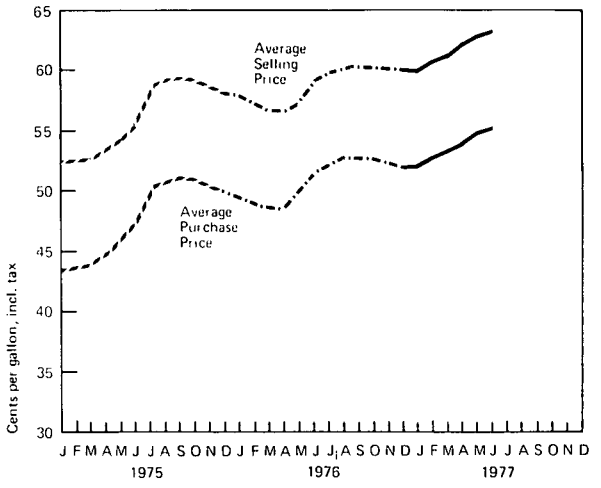
The average price paid by first purchasers for upper tier crude oil in May was $11.00 per barrel, 3 cents above the April price. The domestic average price for all crude oil purchased was $8.49 per barrel, 9 cents above the revised April price.

Motor Gasoline

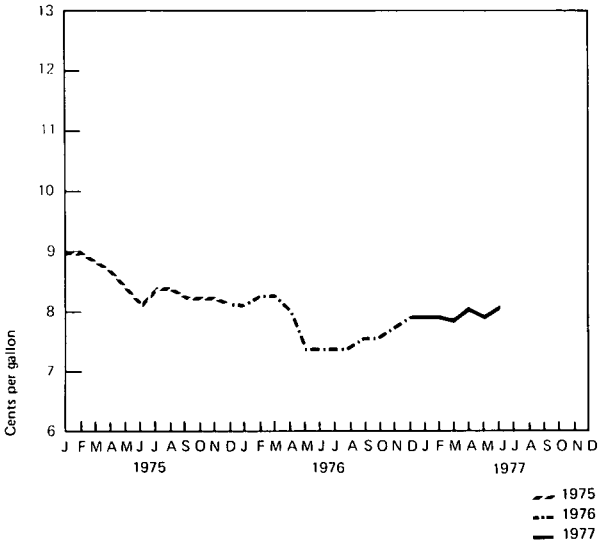
Regular Gasoline at Full Service Retail Outlets

		Average Selling Price	Average Purchase Price	Average Dealer Margin
		Cents per gallon including tax*		
1974	**AVERAGE**	**52.8**	**43.1**	
1975	January	52.4	43.4	9.0
	February	52.5	43.5	9.0
	March	52.6	43.8	8.8
	April	53.5	44.9	8.6
	May	54.3	46.0	8.3
	June	55.6	47.5	8.1
	July	58.7	50.3	8.4
	August	59.2	50.8	8.4
	September	59.3	51.1	8.2
	October	58.9	50.7	8.2
	November	58.4	50.2	8.2
	December	58.0	49.9	8.1
	AVERAGE	**56.2**	**47.8**	
1976	January	57.7	49.6	8.1
	February	57.1	48.8	8.3
	March	56.6	48.3	8.3
	April	56.6	48.6	8.0
	May	57.4	50.0	7.4
	June	59.0	51.6	7.4
	July	59.6	52.2	7.4
	August	60.1	52.7	7.4
	September	60.2	52.6	7.6
	October	60.2	52.6	7.6
	November	60.0	52.2	7.8
	December	59.9	52.0	7.9
	AVERAGE	**58.7**	**51.0**	
1977	January	59.9	52.0	7.9
	February	60.7	52.8	7.9
	March	61.3	53.5	7.8
	April	62.2	54.1	8.1
	May	62.9	55.0	7.9
	June	63.4	55.3	8.1

Average Retail Prices For Regular



Average Margins For Regular



*To derive prices excluding taxes, 12.2 cents per gallon may be deducted for 1974 and 1975, and 12.5 cents per gallon may be deducted for 1976 and 1977.

Sources: FEA for 1974; Lundberg Survey, Inc., for January 1975 forward.

Regular Gasoline at Self Service Retail Outlets

		Average Selling Price	Average Dealer Margin
		Cents per gallon, including tax	
1975	November	55.4	5.5
	December	54.9	5.3
1976	January	54.7	5.4
	February	53.8	5.4
	March	53.2	5.3
	April	53.2	4.9
	May	54.4	4.5
	June	56.3	4.8
	July	56.6	4.6
	August	56.7	4.4
	September	56.5	4.3
	October	56.5	4.4
	November	56.4	4.5
	December	56.1	4.5
1977	January	56.2	4.5
	February	57.1	4.4
	March	57.7	4.4
	April	58.4	4.4
	May	58.9	4.2
	June	59.3	4.3

Source: Lundberg Survey, Inc.

Motor Gasoline (Continued)

Average Selling Prices for Premium and Unleaded Gasoline at Full Service Retail Outlets

		Premium	Unleaded (Regular)
		Cents per gallon, including tax	
1975	January	57.1	NA
	February	57.3	56.1
	March	57.5	56.2
	April	58.2	57.1
	May	59.0	57.9
	June	60.3	58.8
	July	63.1	61.5
	August	63.6	62.0
	September	63.8	62.1
	October	63.4	62.1
	November	63.2	62.0
	December	62.9	61.4
1976	January	62.7	61.2
	February	62.1	60.6
	March	61.6	60.1
	April	61.6	60.4
	May	62.4	61.1
	June	63.9	62.9
	July	64.6	63.2
	August	65.2	63.9
	September	65.3	64.0
	October	65.2	64.0
	November	65.2	63.9
	December	65.0	63.9
1977	January	65.2	64.0
	February	66.1	65.0
	March	66.8	65.4
	April	67.6	66.1
	May	68.4	66.7
	June	68.9	67.2

NA=Not available.
Source: Lundberg Survey, Inc.

Average Selling Prices and Margins for Major and Independent Retail Dealers – June 1977

Regular Gasoline–Full Service

	Cents per gallon, including tax	
	Selling Price	**Margin**
Major	64.3	8.4
Independent	58.7	6.3
National Average	**63.4**	**8.1**

Regular Gasoline–Self Service

	Selling Price	**Margin**
Major	60.0	4.1
Independent	57.4	4.8
National Average	**59.3**	**4.3**

Premium Gasoline–Selling Prices

	Full Service	**Self Service**
Major	69.6	66.3
Independent	63.5	62.4
National Average	**68.9**	**65.2**

Unleaded Gasoline–Full Service Selling Prices

	Regular	**Premium**
Major	67.8	71.7
Independent	61.8	NA
National Average	**67.2**	**71.7**

NA=Not available.
Source: Lundberg Survey, Inc.

Average Regional Selling Prices and Dealer Margins for Regular Gasoline at Full Service Outlets – June 1977

Region	**Selling Price**	**Margin**
	Cents per gallon, including tax	
1A New England	61.7	6.0
1B Mid-Atlantic	64.4	7.2
1C Lower Atlantic	63.5	8.2
2 Mid-Continent	63.4	7.7
3 Gulf Coast	61.7	9.8
4 Rocky Mountain	64.0	9.5
5 West Coast	64.4	8.5
National Average	**63.4**	**8.1**

Source: Lundberg Survey, Inc.

Motor Gasoline (Continued)

Retail Gasoline Price Changes for 21 Leading Refiners During June 1977 and Entitlement Position* During May

Company	Effective Date of Change	Amount of Change	Entitlement Position (May)
		Cents per gallon	
Amerada Hess		None	Seller
American Petrofina		None	Buyer
Ashland		None	Seller
Atlantic Richfield	June 2	0.50 (premium, PAD III)	Seller
	June 4	0.50 (premium, PAD II)	
B.P.	June 3	1.00 (all grades, PAD II)	Seller
Champlin	June 2	0.50 (all grades, PADs II, IV)	Buyer
Chevron	June 1	1.50 (regular, PAD IV)	Seller
		0.50 (regular, PAD V)	
		0.60 (unleaded, PAD V)	
		0.75 (premium (DTW), PAD V)	
		0.70 (consumer tankwagon, PAD V)	
Cities Service		None	Buyer
Continental	June 4	-1.00 (all grades, PAD V)	Buyer
	June 7	-0.50 (all grades, PADs I, II)	
	June 11	0.40 (unleaded, PAD V)	
Exxon		None	Buyer
Getty Refining and Marketing Company		None	Seller
Gulf	June 25	-2.00 (premium, PADs I, III)	Buyer
		-1.00 (leaded regular, unleaded, PADs I, III)	
	June 30	-1.00 (all grades, PADs I, III, V)	
Kerr McGee		None	Buyer
Mobil		None	Buyer
Phillips	June 1	1.00 (all grades, PADs IV, V)	Buyer
Shell		None	Buyer
Standard of Indiana		None	Buyer
Standard of Ohio	June 3	1.00 (all grades, PAD II)	Seller
Sun	June 7	0.80 (all grades, PADs II, III)	Buyer
Texaco		None	Buyer
Union Oil of California	June 13	0.60 (unleaded regular, leaded regular, PAD IV)	Buyer
	June 17	0.70 (unleaded regular, premium, PADs I, II, III)	Buyer

*See Definitions.
Source: FEA.

Jobber Prices for Regular Gasoline Sold by 21 Leading Refiners

		PAD IA	PAD IB	PAD IC	PAD II	PAD III	PAD IV	PAD V	National Average
		Cents per gallon, excluding tax							
1974	**AVERAGE**								**26.7**
1975	January	27.8	27.8	27.4	28.2	27.2	28.5	27.8	27.8
	February	28.4	28.2	27.8	28.7	27.6	28.3	27.5	28.1
	March	28.9	28.8	28.4	29.1	27.8	29.0	28.0	28.6
	April	29.6	29.9	29.4	30.4	29.2	29.8	29.8	29.7
	May	30.9	31.0	30.5	31.6	30.4	31.2	31.0	30.9
	June	32.4	32.5	32.0	33.1	31.6	32.6	32.6	32.4
	July	34.4	34.6	33.9	34.9	33.4	34.5	33.7	34.2
	August	35.3	35.1	34.6	35.6	34.1	35.2	34.5	34.9
	September	35.2	35.1	34.5	35.4	34.1	35.0	34.5	34.8
	October	34.3	34.6	34.0	34.9	33.8	34.3	34.2	34.3
	November	34.1	34.3	33.9	34.6	33.6	34.3	34.0	34.1
	December	33.7	34.1	33.6	34.3	33.3	33.8	33.7	33.8
	AVERAGE								**32.0**
1976	January	33.3	33.9	33.2	34.0	33.1	33.2	33.5	33.5
	February	33.0	33.4	32.6	33.8	32.9	32.6	33.5	33.1
	March	32.4	33.0	31.8	33.4	32.6	32.5	33.2	32.7
	April	33.0	33.5	32.3	33.9	33.2	33.2	33.2	33.2
	May	34.4	34.9	33.6	35.3	34.8	34.8	34.7	34.6
	June	35.7	35.9	34.8	36.5	35.9	36.1	35.5	35.8
	July	36.1	36.3	35.4	36.8	36.3	36.3	36.3	36.2
	August	36.5	36.6	35.7	37.3	36.5	36.4	36.7	36.5
	September	35.8	36.1	35.3	36.9	36.6	35.9	36.5	36.2
	October	35.7	35.8	35.2	36.7	36.4	35.9	36.5	36.0
	November	34.9	35.1	34.4	36.3	36.3	35.3	36.5	35.6
	December	34.9	35.1	34.4	36.3	36.3	35.3	36.5	35.6
	AVERAGE								**35.0**
1977	January	35.6	35.8	35.2	36.9	36.7	35.9	37.0	36.2
	February	36.2	36.5	35.8	37.5	37.5	36.7	38.1	36.9
	March	37.0	37.3	36.7	38.2	38.0	37.0	38.1	37.5
	April	37.6	37.8	37.2	39.0	38.9	37.8	38.8	38.2
	May	38.3	38.4	37.9	39.7	39.3	38.5	39.0	38.7
	June	38.5	38.4	38.1	39.7	39.5	38.7	39.0	38.8

Source: FEA.

Diesel Fuel

Average Selling Prices and Margins for No. 2 Diesel Fuel*

		Selling Price		Margin	
		Truckstops	Service Stations	Truckstops	Service Stations
		Cents per gallon, including tax			
1975	January	NA	50.6	NA	6.8
	February	49.7	50.2	7.0	7.3
	March	50.1	50.2	7.5	7.4
	April	50.5	50.6	7.4	7.5
	May	50.3	51.0	7.0	7.7
	June	51.4	51.4	7.5	7.9
	July	51.2	52.4	7.3	8.2
	August	52.1	52.6	8.1	8.9
	September	52.1	52.7	7.4	8.7
	October	51.8	53.0	6.2	7.7
	November	52.0	53.0	5.3	6.5
	December	51.7	52.4	5.3	6.7
1976	January	52.0	52.5	5.6	7.2
	February	52.1	52.0	6.0	7.3
	March	51.4	52.4	5.6	7.1
	April	51.1	52.8	5.8	7.8
	May	51.4	52.9	6.9	7.8
	June	52.0	53.3	7.0	7.7
	July	52.1	53.1	6.4	7.1
	August	52.3	53.2	6.0	7.0
	September	52.2	53.1	5.7	6.8
	October	52.4	53.1	5.8	6.5
	November	52.9	53.3	6.1	6.4
	December	53.1	53.5	5.7	5.9
1977	January	53.9	54.3	4.9	5.3
	February	55.3	55.6	5.5	5.9
	March	56.0	56.4	5.7	6.2
	April	56.6	56.7	6.5	6.7
	May	56.9	57.1	6.5	6.8
	June	57.3	57.4	7.1	7.2

*See Explanatory Note 13.
NA=Not available.
Source: Lundberg Survey, Inc.

Average Selling Prices and Margins for Major and Independent No. 2 Diesel Fuel Retail Dealers – June 1977

Cents per gallon, including tax

Truckstops

	Selling Price	Margin
Major	58.3	6.5
Independent	56.0	7.6
National Average	**57.3**	**7.1**

Service Stations

	Selling Price	Margin
Major	58.9	6.4
Independent	56.1	7.2
National Average	**57.4**	**7.2**

Source: Lundberg Survey, Inc.

No. 1 Diesel Fuel

		Wholesale	**Retail**
		Cents per gallon, excluding tax	
1975	July	30.1	37.7
	August	30.8	38.2
	September	31.5	36.9
	October	33.1	35.4
	November	33.3	35.0
	December	34.2	35.5
1976	January	33.8	37.1
	February	33.6	35.3
	March	33.9	34.8
	April	34.2	35.4
	May	34.5	37.5
	June	34.7	37.9
	July	35.0	38.1
	August	35.9	38.2
	September	35.3	37.7
	October	36.3	36.4
	November	35.7	36.9
	December	35.5	36.7
1977	January	37.1	R37.8
	February	38.4	39.2
	March	38.0	39.6
	April	R39.2	R40.6
	May*	39.3	41.7

*Preliminary.
Note: Wholesale refers to the price of diesel fuel sold to other refiners and resellers, including branded jobbers, unbranded jobbers, and commercial accounts. Retail refers to the price at which company-owned and -operated retail dealers sell to consumers.
Source: FEA Form P302-M-1 "Petroleum Industry Monthly Report for Product Prices."

Heating Oil

Residential Heating Oil Prices

		Average Selling Price*	Average Purchase Price*	Average Dealer Margin*
		Cents per gallon		
1974	AVERAGE	34.7	26.9	
1975	January	37.4	29.1	8.3
	February	37.0	28.7	8.3
	March	36.6	28.4	8.2
	April	36.1	29.3	6.8
	May	36.7	30.0	6.7
	June	37.1	30.3	6.8
	July	37.2	30.6	6.6
	August	38.0	31.2	6.8
	September	38.4	31.0	7.4
	October	39.3	31.8	7.5
	November	39.4	32.1	7.3
	December	40.1	32.4	7.7
	AVERAGE	37.7	31.2	
1976	January	40.1	32.4	7.7
	February	40.1	32.4	7.7
	March	39.4	NA	NA
	April	39.0	NA	NA
	May	39.0	NA	NA
	June	39.3	NA	NA
	July	39.3	NA	NA
	August	39.8	NA	NA
	September	40.2	NA	NA
	October	40.7	NA	NA
	November	41.9	NA	NA
	December	43.0	NA	NA
1977	January	44.4	NA	NA
	February	45.3	NA	NA
	March	45.8	NA	NA
	April	45.9	NA	NA
	May	45.7	NA	NA

*Average selling prices, purchase prices, and dealer margins represent sales for residential heating oil only.
NA=Not available.
Sources: 1974 through February 1976—Form CLC-92 "No. 2 Heating Oil Monthly Price Adjustment Report;" June 1976 forward—FEA Form P112-M-1 "No. 2 Heating Oil Supply/Price Monitoring Report."

Residential Heating Oil Prices by Region

		New England	Mid-Atlantic	Southeast	East North Central	East South Central	West North Central	West South Central	Mountain	West Coast
		Cents per gallon, including tax								
1975	January	40.2	38.9	36.5	33.2	34.7	34.0	NA	37.5	38.0
	February	39.2	38.4	36.8	33.4	34.7	33.3	NA	36.6	37.7
	March	38.0	37.8	36.4	34.2	33.2	34.3	NA	NA	36.8
	April	37.4	36.8	36.8	33.2	33.7	34.5	NA	38.9	36.8
	May	37.6	36.9	36.4	35.1	34.7	35.4	NA	37.0	37.8
	June	37.7	37.7	36.4	35.8	NA	35.9	NA	37.6	37.6
	July	37.9	36.9	36.9	36.4	34.7	36.8	NA	NA	38.8
	August	38.8	38.2	37.9	36.3	35.7	36.3	NA	41.3	39.3
	September	39.4	38.7	37.6	36.5	35.7	36.8	NA	38.9	40.1
	October	40.3	39.9	38.3	37.4	36.6	37.9	NA	39.0	41.0
	November	41.0	39.6	38.7	37.9	NA	38.1	NA	40.2	41.3
	December	41.0	41.1	39.0	38.5	34.1	38.0	NA	44.8	40.9
1976	January	41.5	40.0	39.6	38.3	37.8	38.2	35.0	41.2	41.6
	February	41.4	40.3	39.4	38.0	37.7	38.3	34.4	41.0	42.1
	March	41.5	39.8	39.2	37.0	36.7	37.6	34.5	40.4	41.9
	April	41.2	40.0	38.9	37.1	35.9	37.3	34.6	40.3	40.8
	May	41.1	39.7	38.2	37.1	35.6	37.3	34.0	40.4	42.1
	June	40.9	41.1	39.1	37.7	37.2	37.3	34.3	40.3	42.8
	July	40.7	39.8	39.1	37.9	36.9	37.3	34.4	40.1	45.0
	August	41.5	40.3	39.5	38.2	37.2	37.7	34.3	39.7	44.7
	September	41.9	40.8	37.5	38.3	38.0	38.8	34.8	41.1	46.0
	October	42.3	41.4	40.4	39.0	38.5	38.7	35.1	42.1	46.0
	November	43.3	42.4	42.1	40.1	39.8	39.5	36.3	42.8	46.5
	December	44.4	43.6	42.9	41.5	41.0	41.9	36.3	42.7	43.8
1977	January	45.8	44.9	44.2	43.2	43.1	43.0	36.9	43.4	44.6
	February	46.6	45.8	45.7	43.9	43.4	44.0	38.8	44.2	45.2
	March	47.1	46.3	45.5	44.4	43.8	44.6	40.2	44.7	45.9
	April	47.2	46.5	45.5	44.8	43.3	44.2	40.8	44.8	46.4
	May	47.0	46.4	45.6	44.7	43.7	43.7	40.7	44.8	46.5

NA=Not available.

Note: Data for West South Central Region are based on a sample of less than four reporting firms.

Sources: January through December 1975—Form CLC-92 "No. 2 Heating Oil Monthly Price Adjustment Report;" January 1976 forward—FEA Form P112-M-1 "No. 2 Heating Oil Supply/Price Monitoring Report."

Average Distributor Purchase Prices for Heating Oil by Region

		New England	Mid-Atlantic	Southeast	East North Central	East South Central	West North Central	West South Central	Mountain	West Coast
						Cents per gallon				
1975	January	30.3	29.7	28.5	27.2	28.8	27.5	NA	28.5	29.7
	February	29.6	29.3	28.6	27.2	28.8	27.3	NA	29.4	28.5
	March	29.5	29.3	29.1	28.1	26.8	28.1	NA	NA	27.6
	April	29.4	29.5	29.7	28.3	27.8	29.5	NA	29.0	28.5
	May	30.5	30.0	30.0	30.0	28.8	29.4	NA	30.9	28.7
	June	30.4	30.2	30.6	30.5	NA	30.7	NA	31.8	29.0
	July	30.7	30.1	29.9	31.6	28.8	31.4	NA	NA	30.4
	August	31.6	30.8	30.9	31.2	29.8	30.2	NA	31.6	32.8
	September	31.4	30.9	30.7	30.6	29.8	30.6	NA	31.9	31.4
	October	32.0	31.9	31.3	31.5	31.1	31.4	NA	34.4	32.5
	November	32.5	31.7	32.0	32.1	NA	32.0	NA	34.1	32.3
	December	32.9	32.7	31.8	32.0	29.4	31.4	NA	33.9	32.8
1976	January	32.5	32.5	31.9	32.3	NA	32.3	NA	33.6	32.9
	February	32.8	32.9	31.6	31.9	31.3	32.1	NA	NA	31.1

NA=Not available.
Source: Form CLC-92 "No. 2 Heating Oil Monthly Price Adjustment Report."

Residual Fuel Oil

RESIDUAL FUEL OIL
(Dollars per barrel)

		NO. 5		NO. 6								BUNKER "C"		TOTAL
				0.0 to 0.3 percent sulfur		0.31 to 1.0 percent sulfur		Greater than 1.0 percent sulfur		Total				
		Wholesale	Retail	Wholesale	Retail	Wholesale	Retail	Wholesale	Retail	Wholesale	Retail	Wholesale	Retail	
1975	July	10.19	11.28	11.57	12.86	10.90	12.05	10.25	10.59	10.66	11.70	7.88	10.54	11.27
	August	10.19	11.04	11.53	13.22	10.85	12.34	9.72	10.53	10.49	11.89	8.76	10.43	11.32
	September	10.58	11.07	11.75	12.94	10.63	11.65	9.87	10.52	10.48	11.52	8.93	10.29	11.09
	October	10.15	11.12	11.50	[illegible]98	10.37	12.09	9.75	10.38	10.30	11.69	8.88	10.31	11.13
	November	10.90	11.27	12.21	12.96	10.33	12.03	9.90	10.34	10.47	11.68	9.01	10.43	11.24
	December	10.83	11.64	11.89	12.87	10.37	11.83	9.65	10.06	10.24	11.42	9.07	10.15	10.97
1976	January	11.08	11.63	12.13	12.39	10.62	11.61	9.58	10.23	10.53	11.35	8.75	10.35	11.02
	February	10.55	11.57	12.42	12.78	10.87	11.84	9.70	10.35	10.73	11.52	8.53	10.27	11.15
	March	10.41	11.89	12.36	12.81	11.05	11.80	9.56	10.21	10.74	11.43	8.59	10.35	11.12
	April	10.21	11.58	11.44	12.34	10.86	11.77	9.53	10.28	10.38	11.43	8.66	10.12	11.02
	May	9.87	11.49	11.71	11.87	10.80	11.40	9.47	9.89	10.11	10.95	8.75	10.65	10.63
	June	9.91	11.23	11.71	12.24	10.33	11.36	9.73	10.03	10.12	11.04	8.57	10.10	10.70
	July	10.06	11.70	11.71	12.12	10.22	11.36	9.83	10.04	10.25	11.04	9.23	10.34	10.74
	August	9.78	11.48	11.67	12.79	10.45	11.46	9.61	10.22	10.20	11.20	8.93	9.98	10.82
	September	10.36	11.37	11.75	12.50	10.33	11.55	10.04	10.28	10.35	11.30	9.22	10.05	10.91
	October	10.25	11.64	11.86	12.94	11.04	12.12	10.00	10.73	10.75	11.82	9.57	10.81	11.43
	November	10.84	12.04	12.33	13.15	11.62	12.21	10.40	10.98	11.16	11.95	10.31	10.83	11.61
	December	11.49	12.64	13.16	13.32	11.74	12.76	11.04	11.48	11.87	12.44	9.95	11.24	11.94
1977	January	12.00	13.39	14.06	14.34	12.74	13.68	11.51	12.32	12.45	13.32	10.34	11.89	12.94
	February	12.28	13.66	14.00	14.60	12.91	14.08	12.04	12.74	12.69	13.71	10.24	12.00	13.22
	March	12.21	13.75	14.00	14.57	13.48	14.51	11.62	12.69	12.68	13.84	9.97	11.74	13.27
	April	R11.62	13.26	R12.88	14.63	R13.05	14.10	R11.27	12.50	R12.04	13.61	R10.14	11.75	R12.92
	May*	11.51	12.70	13.40	14.50	11.76	13.81	11.04	12.15	11.52	13.18	9.90	11.43	12.74

*Preliminary.
R=Revised data.
Note: Wholesale refers to the price of residual fuel sold to other refiners and resellers, including bulk plants, branded and unbranded jobbers, and other residual dealers. Retail refers to the price at which residual fuel oil is sold to ultimate consumers such as utility, industrial, institutional, commercial, and residential accounts.
Source: FEA Form P302-M-1 "Petroleum Industry Monthly Report for Product Prices."

Aviation Fuels

AVIATION FUELS
(Cents per gallon)

		Aviation Gasoline		Naphtha-Type*	Kerosene-Type	
		Wholesale	Retail	Retail	Wholesale	Retail
1975	July	40.6	40.6	31.4	29.8	29.2
	August	41.3	42.1	30.8	32.1	29.5
	September	41.2	39.9	30.3	31.5	29.6
	October	41.1	41.2	30.2	31.7	30.0
	November	39.7	42.1	30.6	31.6	30.2
	December	40.9	40.9	30.7	31.9	30.5
1976	January	41.4	41.2	31.0	30.6	31.3
	February	41.2	42.0	31.1	31.1	31.2
	March	41.1	41.9	30.9	31.2	30.7
	April	41.2	42.5	30.5	31.9	30.5
	May	42.1	43.1	30.6	33.0	30.2
	June	42.6	42.3	31.5	32.1	30.3
	July	43.6	44.2	31.3	32.9	30.8
	August	43.7	44.1	31.7	32.1	31.1
	September	43.6	44.7	32.1	32.5	31.4
	October	43.6	43.8	32.4	33.5	31.9
	November	43.4	43.9	32.7	33.4	32.4
	December	43.5	43.7	32.7	34.7	32.2
1977	January	43.4	44.1	33.4	34.6	33.2
	February	44.7	45.0	34.0	37.1	34.1
	March	45.0	45.7	R34.5	35.9	34.6
	April	46.0	47.2	34.3	35.9	34.9
	May**	46.6	47.8	34.3	36.6	35.1

*Nearly all naphtha-type fuels are sold directly to the Defense Fuel Supply Center. Consequently, wholesale prices are not applicable.
**Preliminary.
Note: Wholesale refers to the price of aviation fuel sold to refiners and resellers, including bulk plants, branded and unbranded jobbers, and aviation fuel distributors. Retail refers to the price of aviation fuel sold to ultimate consumers, including commercial airline and military accounts.
Source: FEA Form P302-M-1 "Petroleum Industry Monthly Report for Product Prices."

Crude Oil

Domestic Crude Petroleum Prices at the Wellhead*

		Old	New	Domestic Average
		Dollars per barrel		
1974	**AVG.**	**5.03**	**10.13**	**6.87**
1975	January	5.05	11.28	7.61
	February	5.03	11.39	7.47
	March	5.03	11.47	7.57
	April	5.03	11.64	7.55
	May	5.03	11.69	7.52
	June	5.03	11.73	7.49
	July	5.03	12.30	7.75
	August	5.03	12.38	7.73
	September	5.04	12.46	7.75
	October	5.03	12.73	7.83
	November	5.03	12.89	7.80
	December	5.03	12.95	7.93
	AVG.	**5.03**	**12.03**	**7.67**
1976	January	5.02	12.99	8.63

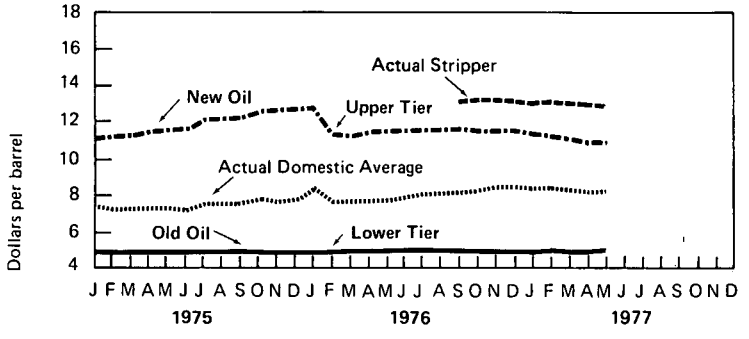
(Table continued in next column)

		Lower Tier**	Upper Tier**	Domestic Average
		Dollars per barrel		
1976	February	5.05	11.47	7.87
	March	5.07	11.39	7.79
	April	5.07	11.52	7.86
	May	5.13	11.55	7.89
	June	5.15	11.60	7.99
	July	5.19	11.59	8.04
	August	5.18	11.62	8.03

		Lower Tier**	Upper Tier**	Actual Stripper†	Actual Domestic Average††	Imputed Domestic Average††
				Dollars per barrel		
	September	5.17	11.65	13.21	8.39	8.19
	October	5.15	11.62	13.35	8.46	8.23
	November	5.17	11.62	13.31	8.62	8.40
	December	5.17	11.64	13.30	8.62	8.40
1977	January	5.17	11.44	13.27	8.50	8.28
	February	5.18	11.39	13.32	8.57	8.32
	March	5.15	11.03	13.31	8.45	8.19
	April	R5.15	10.97	13.28	R8.40	8.15
	May***	5.18	11.00	13.26	8.49	8.23

*See Explanatory Note 14.
**See Definitions.
***Preliminary figure based on early reports.
†Stripper oil was exempt from price controls beginning September 1, 1976. From February through August 1976, stripper oil was subject to upper tier price ceilings.
††The actual domestic average price represents the average price at which all domestic crude oil is purchased. The imputed domestic average price is the average price used to establish ceiling prices for domestic crude oil in accordance with the provisions of the Energy Conservation and Production Act. It is calculated as the weighted average of lower tier, upper tier, and an imputed stripper crude oil price. The imputed stripper crude oil price is equal to $11.63 per barrel plus the difference between the composite price of crude oil in August 1976 (excluding stripper oil) and the composite price of crude oil in the month of measurement (excluding stripper oil).
Sources: 1974 through January 1976—Form FEA-90 "Crude Petroleum Production Monthly Report;" February 1976 forward—FEA Form P124-M-O "Domestic Crude Oil Purchasers Report."

Crude Oil Wellhead Price



Percentages of Domestic Production Sold at the Wellhead

		Old Oil	New Oil	Released	Stripper
1975	January*	58	19	10	12
	February*	61	17	9	12
	March	60	18	10	12
	April	61	17	9	12
	May	62	17	8	13
	June	63	16	8	13
	July	62	16	8	14
	August	63	16	7	14
	September*	63	15	7	14
	October	63	16	7	14
	November	64	15	7	14
	December	63	16	7	14
	AVERAGE	**62**	**16**	**8**	**13**
1976	January	54	21	10	15
		Lower Tier	**Upper Tier**		
	February	56	30	--	14
	March	57	29	–	14
	April	57	29	–	14
	May	57	29	–	14
	June	56	29	–	15
	July	56	30	–	14
	August	56	30	–	14
		Lower Tier	**Upper Tier**		**Stripper**
	September	53.4	33.7		12.9
	October	52.4	34.7		12.9
	November	49.9	36.6		13.4
	December	50.1	36.4		13.6
1977	January	50.6	36.7		12.7
	February	49.5	37.2		13.3
	March	49.2	37.2		13.6
	April	49.5	36.9		13.6
	May**	48.5	37.5		14.0

*Totals do not add to 100 due to rounding.
**Preliminary.
Sources: January 1975 through January 1976—Form FEA-90 "Crude Petroleum Production Monthly Report;" February 1976 through August 1976—FEA Form P124-M-0 ,'Comestic Crude Oil Purchasers Report" for Lower Tier percentages and FEA estimates for Upper Tier percentages; September 1976 forward—FEA For P124-M-0 "Domestic Crude Oil Purchasers Report" for Lower Tier, Upper Tier, and Stripper percentages.

Crude Oil (Continued)

		Entitlement Price* (Dollars)	National Old Oil Supply Ratio*	Crude Oil Entitlement Benefit* (Dollars)
1974	November	5.00	.411	2.06
	December	5.00	.400	2.00
1975	January	6.00	.352	2.11
	February	6.75	.373	2.52
	March	7.31	.359	2.62
	April	7.29	.390	2.84
	May	7.39	.383	2.83
	June	7.82	.360	2.82
	July	8.13	.354	2.88
	August	8.31	.352	2.93
	September	8.31	.355	2.95
	October	8.62	.356	3.07
	November	8.94	.343	3.07
	December	8.55	.363	3.10
1976	January	8.09	.309	2.50
			National Domestic Crude Oil Supply Ratio	
1976	February	7.85	.352	2.76
	March	7.89	.358	2.82
	April	7.85	.356	2.79
	May	7.82	.356	2.78
	June	7.91	.328	2.59
	July	7.80	.314	2.45
	August	8.02	.319	2.56
	September	7.80	.296	2.31
	October	7.84	.293	2.30
	November	7.90	.273	2.16
	December	7.97	.263	2.10
1977	January	8.30	.266	2.21
	February	8.53	.267	2.28
	March	8.71	.273	2.38
	April	8.69	.285	2.48
	May	8.77	.280	2.46

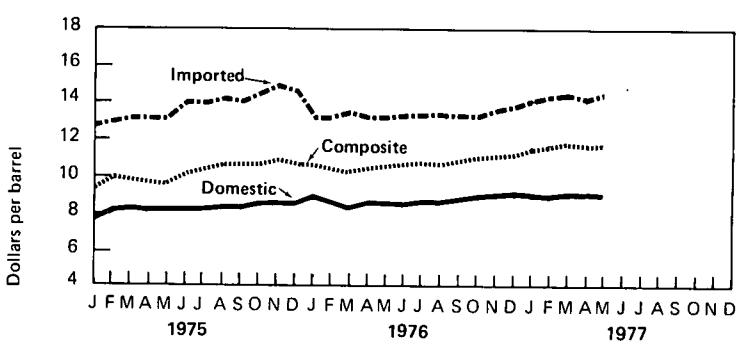
*See Definitions.
Source: FEA.

Refiner Acquisition Cost of Crude Petroleum*

		Domestic	Imported	Composite
		Dollars per barrel		
1974	**AVERAGE**	**7.18**	**12.52**	**9.07**
1975	January	7.78	12.77	9.48
	February	8.29	13.05	10.09
	March	8.38	13.28	9.91
	April	8.23	13.26	9.83
	May	8.33	13.27	9.79
	June	8.33	14.15	10.33
	July	8.37	14.03	10.57
	August	8.48	14.25	10.81
	September	8.49	14.04	10.79
	October	8.68	14.66	10.85
	November	8.67	15.04	11.05
	December	8.66	14.81	10.98
	AVERAGE	**8.39**	**13.93**	**10.38**
1976	January	9.14	13.27	10.76
	February	8.67	13.26	10.54
	March	8.48	13.51	10.44
	April	8.66	13.39	10.63
	May	8.62	13.41	10.66
	June	8.60	13.48	10.88
	July	8.72	13.51	10.97
	August	8.65	13.58	10.78
	September	8.95	13.47	11.08
	October	9.13	13.49	11.20
	November	9.23	13.58	11.26
	December	9.25	13.71	11.32
	AVERAGE	**8.84**	**13.48**	**10.89**
1977	January	9.23	14.11	11.64
	February	9.24	14.50	11.80
	March	9.32	14.54	11.88
	April	R9.21	R14.36	R11.75
	May**	9.15	14.61	11.80

*See Explanatory Note 15.
**Preliminary data.
R=Revised data.
Sources: 1974 through January 1976—Form FEO-96 "Monthly Cost Allocation Report;" February 1976 forward—FEA Form P110-M-1 "Refiners' Monthly Cost Allocation Report."

Crude Oil Refiner Acquisition Cost



Crude Oil (Continued)

Estimated Landed Cost of Imported Crude Petroleum From Selected Countries*

		Algeria	Canada	Indonesia	Iran	Nigeria	Saudi Arabia	U.A. Emirates	Venezuela
					Dollars per barrel				
1975	January	12.72	12.43	13.30	12.11	12.07	12.07	13.14	11.37
	February	12.11	12.15	13.52	11.86	12.18	11.94	12.67	11.56
	March	12.46	12.79	13.94	12.08	12.56	11.78	13.40	11.66
	April	12.36	12.95	13.71	12.34	12.46	12.16	12.55	11.61
	May	12.41	12.08	13.71	11.93	12.34	12.27	13.29	11.54
	June	12.37	11.90	13.73	12.51	12.49	11.93	12.48	11.51
	July	12.69	12.15	13.98	11.83	12.37	12.08	12.78	11.46
	August	12.68	12.27	13.85	12.17	12.32	12.10	12.60	11.44
	September	12.52	12.63	13.75	11.97	12.42	12.17	12.49	11.42
	October	13.45	13.02	14.00	12.27	13.18	12.64	12.85	12.08
	November	13.28	14.00	13.81	12.47	13.37	12.58	13.23	12.38
	December	13.46	13.96	13.92	13.01	13.57	12.93	13.21	12.31
1976	January	13.56	12.95	13.89	13.01	13.61	13.18	13.50	11.60
	February	13.57	13.24	13.94	12.87	13.52	13.21	13.36	12.09
	March	13.83	13.30	13.94	12.77	13.62	13.18	13.37	11.71
	April	13.73	13.61	13.78	12.91	13.60	13.11	13.18	11.95
	May	13.47	13.62	13.84	12.82	13.62	13.05	13.39	11.61
	June	13.75	14.19	13.84	13.00	13.78	13.14	13.09	11.55
	July	13.77	13.79	13.80	12.76	13.81	13.02	13.45	11.44
	August	13.91	13.78	13.78	13.09	13.87	13.03	13.23	11.77
	September	14.03	13.70	13.80	12.78	13.82	12.87	13.44	11.98
	October	13.81	13.71	13.84	12.73	13.99	12.87	13.22	11.84
	November	13.84	13.59	13.77	12.58	13.95	13.01	13.18	12.01
	December	14.14	13.52	13.75	12.69	14.11	13.02	13.29	12.19
1977	January	14.80	13.92	14.42	13.16	14.97	13.22	13.56	13.29
	February	15.18	13.74	14.57	13.56	15.12	13.32	13.46	13.76
	March	15.08	14.34	14.64	13.94	15.13	13.50	13.80	13.41
	April	15.21	14.02	14.70	13.95	15.37	13.41	13.78	13.19

*See Explanatory Note 16.
Source: FEA Form F 701-M-O "Transfer Pricing Report."

Unrecouped Costs for Refined Products for 30 Largest Refiners

		Distillate*	Motor Gasoline	Aviation Jet Fuel**	Other Products	Total
				Millions of dollars		
1975	January	254	431	–	672	1,357
	February	300	418	–	790	1,508
	March	282	452	–	966	1,700
	April	302	485	–	807	1,594
	May	292	370	–	771	1,433
	June	284	266	–	785	1,334
	July	233	219	–	624	1,075
	August	280	344	–	583	1,208
	September	347	335	–	661	1,342
	October	338	245	–	673	1,255
	November	426	275	–	796	1,497
	December	446	211	–	826	1,483
1976	January	336	242	131	515	1,224
	February	279	336	145	456	1,216
	March	263	316	163	456	1,198
	April	237	398	180	524	1,339
	May	264	632	161	446	1,503
	June	–	628	135	349	1,112
	July	–	587	129	384	1,100
	August	–	679	125	352	1,156
	September	–	619	134	340	1,093
	October	–	733	151	372	1,256
	November	–	796	168	368	1,332
	December	–	723	139	317	1,179
1977	January	–	901	166	325	1,392
	February	–	1,038	187	303	1,528
	March	–	956	180	287	1,423
	April	–	R1,029	R194	R343	R1,566
	May***	–	967	199	328	1,494

*Includes No. 2 heating oil and No. 2 diesel fuel only. After May 1976, reporting of the distillate bank is no longer required due to decontrol of middle distillates.
**Prior to January 1976 refiners were not required to maintain separate banks for aviation jet fuel.
***Preliminary.
Source: FEA Form P110-M-1 "Refiners' Monthly Cost Allocation Report."

Natural Gas

Natural Gas Prices Reported by Major Interstate Pipeline Companies

		PURCHASES			SALES		
		From Domestic Producers	From Canadian and Mexican Sources	Total Purchases	To Industrial Users*	To Resellers**	Total Sales
		Cents per thousand cubic feet					
1975	January	30.4	104.0	35.8	67.8	70.9	71.2
	February	29.5	105.9	35.2	70.1	74.0	74.3
	March	33.5	102.5	38.8	70.4	77.7	77.8
	April	32.8	102.8	38.3	71.1	82.3	81.9
	May	34.7	100.6	39.8	71.1	83.7	82.8
	June	35.3	98.9	40.2	72.2	85.1	83.9
	July	36.7	101.1	41.7	73.9	84.6	83.6
	August	35.5	141.0	43.3	73.4	86.5	85.1
	September	36.5	141.1	44.4	72.8	85.9	84.7
	October	36.0	140.1	44.3	77.2	85.9	85.4
	November	36.5	162.5	46.7	77.8	86.9	86.6
	December	35.9	161.8	46.0	81.1	79.6	80.1
1976	January	38.6	164.0	48.6	87.5	88.7	89.2
	February	39.5	165.3	49.5	87.7	92.3	92.7
	March	39.5	164.5	49.7	86.4	89.8	90.2
	April	40.6	164.3	51.2	88.6	100.2	99.7
	May	42.4	165.1	52.5	86.9	98.3	97.6
	June	43.7	166.6	53.7	89.5	98.2	98.5
	July	43.6	168.4	53.2	94.3	101.8	101.1
	August	56.4	167.7	65.3	97.8	104.8	104.1
	September	68.5	183.7	77.7	103.5	92.5	94.1
	October	57.4	190.1	68.8	106.4	105.4	105.7
	November	52.6	182.4	63.3	112.9	106.1	106.9
	December	54.0	189.4	65.2	131.3	117.3	118.1

*Represents direct sales by pipeline companies to industrial users. Does not include sales to industrial users by resellers.

**Includes the cost of gas to the distributing utility at entrance of distribution system or point of receipt.

Source: Federal Power Commission Form 2.

Intrastate Natural Gas Prices for Selected States by Type of Contract*

	California		Kansas		Louisiana		Oklahoma		Texas	
	New Contracts	Renegotiated or Amended	New Contracts	Renegotiated or Amended	New Contracts	Renegotiated or Amended	New Contracts	Renegotiated or Amended	New Contracts	Renegotiated or Amended
	Cents per thousand cubic feet									
1975										
January	75.00	76.89	55.30	–	98.04	102.96	95.99	76.03	139.90	164.04
February	–	–	–	–	128.68	113.06	97.30	64.49	154.72	163.11
March	–	–	–	–	115.78	125.89	107.70	55.05	96.66	97.50
April	–	–	64.65	45.24	149.78	134.81	132.58	87.79	160.09	176.32
May	–	–	–	–	126.80	123.53	129.31	106.56	156.72	158.59
June	–	53.68	65.00	–	130.91	129.57	94.22	120.29	165.00	187.54
July	–	65.51	–	–	117.22	125.63	133.87	114.62	183.22	178.22
August	–	75.00	198.24	–	132.87	114.20	136.77	121.21	151.87	132.50
September	–	86.00	152.89	70.38	121.89	141.23	143.73	106.69	169.87	180.77
October	135.53	–	–	–	75.16	117.60	143.09	144.14	168.10	187.30
November	–	–	157.95	139.02	138.42	71.65	140.61	133.15	149.43	182.17
December	–	–	–	80.00	139.64	131.92	132.50	153.86	187.20	140.90
1976										
January	–	83.97	103.81	84.54	138.75	131.23	149.87	109.39	181.05	193.31
February	–	40.00	–	109.68	125.00	145.30	133.72	146.71	176.63	191.54
March	–	–	150.36	–	145.66	155.39	162.83	168.57	178.70	176.44
April	195.00	–	150.00	–	142.99	154.05	162.12	148.30	202.60	152.95
May	122.00	60.39	180.39	149.84	125.54	106.05	156.35	164.02	154.00	197.22
June	–	–	114.45	150.82	147.11	137.67	169.56	168.14	178.01	192.98
July	–	117.15	137.57	150.83	127.55	141.71	148.20	95.00	151.19	176.23
August	–	97.38	–	–	138.70	164.23	151.81	171.49	157.98	198.81
September	–	–	–	125.68	164.10	156.39	164.85	172.00	184.07	197.66
October	–	–	–	111.72	144.64	149.91	163.48	161.16	196.58	188.80
November	–	–	150.82	144.21	–	131.91	162.57	90.73	186.80	182.82
December	–	97.47	160.73	–	194.51	152.45	167.55	175.98	198.71	202.54
1977										
January	–	105.58	155.49	–	155.82	137.65	172.35	167.49	193.36	204.06
February	–	107.27	121.66	–	141.33	120.84	147.86	131.27	185.55	203.22
March	119.79	116.28	148.18	–	219.43	208.97	168.57	168.28	197.14	190.83

*Prices are for FPC jurisdictional natural gas companies selling more than 1 billion cubic feet per year in interstate commerce.
Source: Federal Power Commission Form 45 "Summary of Intrastate Natural Gas Prices."

Average Retail Prices for Natural Gas Sold to Residential Customers for Heating Use

		Cents per thousand cubic feet
1975	January	141.2
	February	144.7
	March	146.1
	April	150.6
	May	153.7
	June	155.7
	July	154.7
	August	155.4
	September	159.4
	October	160.6
	November	166.2
	December	170.2
1976	January	171.4
	February	175.2
	March	177.0
	April	178.4
	May	180.8
	June	183.2
	July	184.5
	August	185.8
	September	191.2
	October	195.0
	November	198.3
	December	208.3
	AVERAGE	**185.8**
1977	January	213.8
	February	217.0
	March	219.9
	April	223.7
	May	227.0
	June	227.3

Source: Bureau of Labor Statistics.

Utility Fossil Fuels

U.S. Average Delivered Prices of Coal at Utilities

		Contract	Spot
		Dollars per short ton	
1975	January	14.57	28.12
	February	15.71	25.93
	March	15.68	25.02
	April	15.88	24.52
	May	16.45	23.78
	June	16.40	23.36
	July	16.06	22.35
	August	16.65	22.39
	September	16.76	22.46
	October	16.72	22.52
	November	16.79	22.50
	December	16.90	22.40
1976	January	16.53	21.75
	February	17.04	21.23
	March	17.65	21.36
	April	17.76	21.43
	May	18.12	21.17
	June	18.05	20.88
	July	17.93	21.00
	August	18.19	21.35
	September	18.55	21.46
	October	18.49	21.28
	November	18.26	21.56
	December	18.15	21.49
1977	January	17.87	21.93
	February	18.28	22.71

Source: Federal Power Commission Form 423.

Utility Fossil Fuels (Continued)

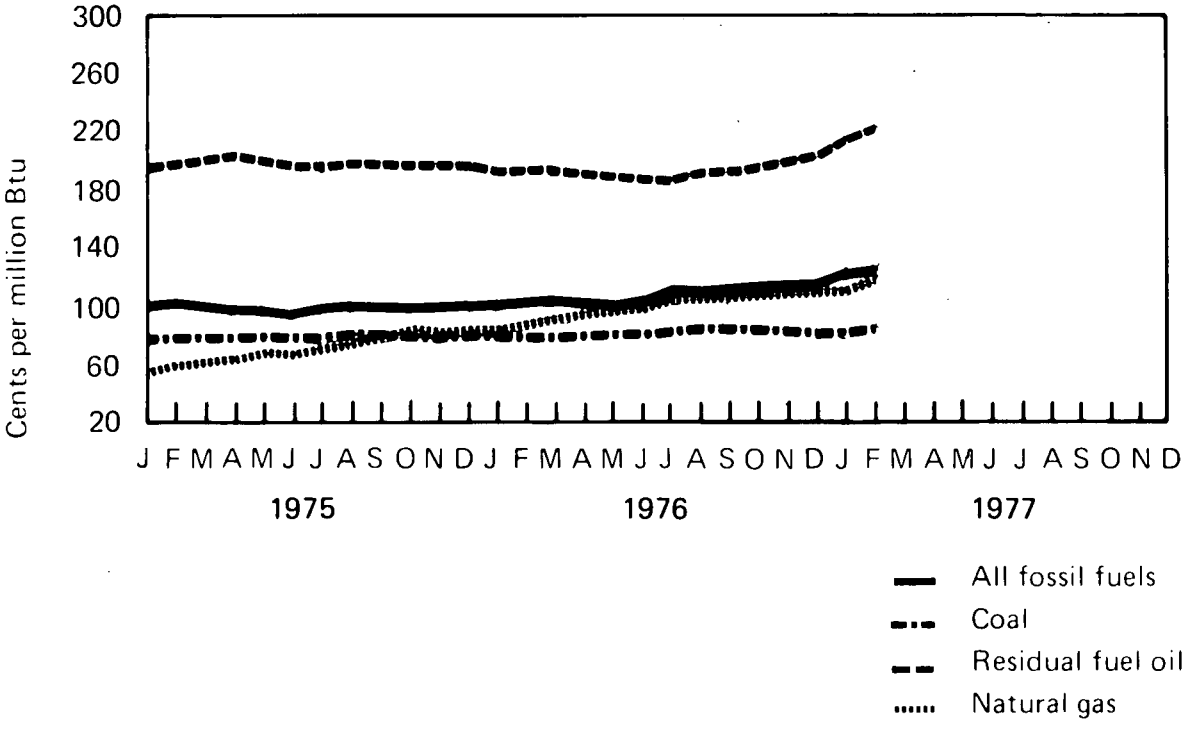
COST OF FOSSIL FUELS DELIVERED TO STEAM ELECTRIC UTILITY PLANTS

All Fossil Fuels*

Region	1976 FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	1977 JAN	FEB
	Cents per million Btu												
New England	184.6	182.3	184.3	174.6	174.2	172.4	173.7	176.6	184.0	186.9	197.0	207.7	211.4
Middle Atlantic	142.2	136.8	136.9	136.6	137.9	144.5	140.2	135.2	136.8	139.8	146.5	161.8	162.1
East North Central	90.0	88.3	91.3	92.1	93.8	100.9	97.6	95.2	95.8	96.8	94.4	104.1	102.7
West North Central	67.4	67.5	67.2	68.9	69.1	70.8	75.1	76.1	73.5	76.1	78.5	85.4	85.3
South Atlantic	122.7	118.3	119.2	120.0	118.9	130.7	126.2	125.6	127.2	129.1	134.7	146.5	142.5
East South Central	88.0	87.4	90.4	90.9	90.0	93.2	94.6	94.4	93.8	92.3	96.7	99.8	101.8
West South Central	88.2	91.7	93.5	94.6	98.6	101.2	102.9	102.4	101.6	106.2	106.9	113.6	119.8
Mountain	48.3	58.4	56.1	50.1	53.0	55.4	57.9	55.3	55.4	54.2	53.9	53.0	55.2
Pacific	206.5	211.3	196.2	180.3	177.2	180.2	195.7	195.9	199.1	214.5	218.9	219.2	213.6
NATIONAL AVG.	**107.6**	**107.8**	**106.4**	**105.8**	**107.0**	**113.2**	**112.9**	**110.7**	**111.1**	**115.2**	**118.6**	**126.8**	**128.4**

*See Explanatory Note 17.
Source: Federal Power Commisison Form 423.

National Average



Coal

Region	1976 FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	1977 JAN	FEB
	Cents per million Btu												
New England	122.7	119.4	124.8	127.0	122.3	127.9	127.8	125.4	125.6	125.6	124.4	127.6	126.8
Middle Atlantic	103.4	101.7	100.2	101.7	102.5	107.5	103.3	102.6	102.6	100.2	101.2	105.9	101.2
East North Central	83.1	82.7	85.0	86.8	86.6	92.4	90.9	89.8	89.2	90.2	90.7	90.7	91.5
West North Central	60.2	62.3	64.1	65.8	64.7	65.3	70.1	71.0	69.3	69.6	67.6	66.5	68.4
South Atlantic	99.2	99.7	100.8	100.8	100.7	104.4	103.5	103.4	105.4	103.8	104.1	105.4	106.5
East South Central	83.5	82.6	83.4	85.1	84.5	85.5	85.7	87.2	88.3	87.4	90.6	91.2	94.1
West South Central	26.4	26.4	26.4	26.4	27.3	32.4	36.4	42.4	43.7	51.5	56.6	58.8	61.1
Mountain	33.0	42.4	34.6	32.2	35.9	35.3	36.8	36.2	38.2	39.1	38.1	37.6	38.9
Pacific	76.0	74.5	75.5	75.7	75.2	75.8	75.7	75.7	76.0	75.6	74.5	77.6	80.5
NATIONAL AVG.	**81.4**	**83.3**	**83.7**	**84.6**	**84.6**	**85.7**	**86.4**	**86.9**	**86.9**	**86.6**	**86.6**	**85.9**	**88.0**

Residual Fuel Oil*

Region	1976 FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	1977 JAN	FEB
	Cents per million Btu												
New England	185.4	183.5	185.7	170.0	177.8	175.4	182.8	179.5	188.1	192.0	198.9	213.6	223.5
Middle Atlantic	179.9	191.8	197.1	190.3	187.3	184.3	189.3	190.0	199.5	200.5	208.3	220.5	235.8
East North Central	193.4	200.9	198.4	202.8	211.8	214.8	222.8	221.4	225.8	223.9	227.9	247.5	267.7
West North Central	162.2	153.4	153.0	145.6	148.8	151.3	148.4	149.6	156.8	167.9	191.5	201.0	210.3
South Atlantic	177.5	178.6	179.6	171.3	171.9	174.1	176.6	180.4	184.1	189.2	197.0	212.4	213.7
East South Central	173.7	174.3	176.0	170.9	166.9	171.0	171.3	163.8	166.6	167.8	166.4	166.2	182.7
West South Central	190.7	183.0	187.4	182.0	176.4	173.3	178.6	166.4	176.6	180.3	179.9	192.0	198.1
Mountain	203.5	205.0	220.8	206.4	212.4	217.2	224.8	213.0	221.9	209.3	181.2	201.0	210.9
Pacific	240.7	240.3	232.7	229.2	229.1	228.7	228.8	230.2	231.2	234.1	233.4	231.3	231.0
NATIONAL AVG.	**195.4**	**197.7**	**196.7**	**188.1**	**187.4**	**187.0**	**191.8**	**191.9**	**198.8**	**203.5**	**207.5**	**217.2**	**223.3**

Natural Gas**

Region	1976 FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	1977 JAN	FEB
	Cents per million Btu												
New England	166.1	151.6	134.5	144.0	153.7	154.1	153.9	154.4	155.4	185.2	186.1	200.1	200.1
Middle Atlantic	195.8	106.3	150.3	111.5	108.0	114.8	114.5	122.7	125.2	111.9	127.8	211.3	349.8
East North Central	124.4	125.0	127.7	135.3	139.8	138.2	147.8	148.4	153.0	168.8	188.9	186.5	174.7
West North Central	61.6	61.5	68.0	73.4	78.1	78.4	81.4	81.9	80.8	84.1	84.0	86.1	93.4
South Atlantic	82.0	75.5	78.2	84.0	83.1	88.7	82.9	88.3	89.3	89.1	90.4	80.4	112.1
East South Central	157.4	147.5	148.0	128.6	123.0	136.9	132.5	137.7	158.5	162.2	160.8	165.1	170.3
West South Central	87.3	90.8	92.3	94.0	98.1	100.4	101.6	101.8	101.0	106.6	106.8	108.1	114.6
Mountain	85.5	87.4	90.4	87.4	89.5	90.8	101.7	104.3	112.2	118.2	136.0	133.3	115.0
Pacific	151.6	149.5	152.6	147.3	147.6	146.6	155.3	166.5	169.0	177.5	188.7	196.8	189.2
NATIONAL AVG.	**92.1**	**94.9**	**97.4**	**100.8**	**104.4**	**106.2**	**106.5**	**109.8**	**109.9**	**113.1**	**111.3**	**111.1**	**123.5**

*See Explanatory Note 17.

**Includes small quantities of coke oven gas, refinery gas, and blast furnace gas.

Source: Federal Power Commission Form 423.

Petroleum Consumption

Petroleum consumption data for January through May 1977 are available for France and Italy. Both countries show consumption reductions compared with the same period in 1976 (France, down 2.7 percent; Italy, down 3.3 percent).

Crude Oil Production

Total world crude oil production dropped to 58.8 million barrels per day in May from 60.6 million in April. OPEC production fell 1.4 million barrels per day to 30.6 million. Contributing most to the OPEC drop was a 1.5-million-barrel-per-day decrease in Saudi Arabian production that was caused by a pipeline fire and accident at Abqaiq. Partially offsetting this was a 300,000-barrel-per-day increase in production in Iran. Nevertheless, May 1977 production rates compared favorably with May 1976 figures. Total world production is 5.6 percent higher, and OPEC production is 4.5 percent higher.

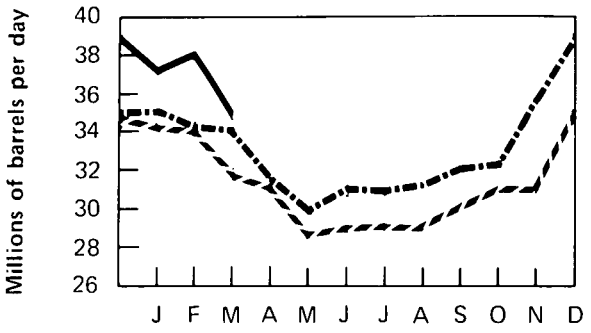
Petroleum Consumption

Petroleum Consumption for Major Free World Industrialized Countries

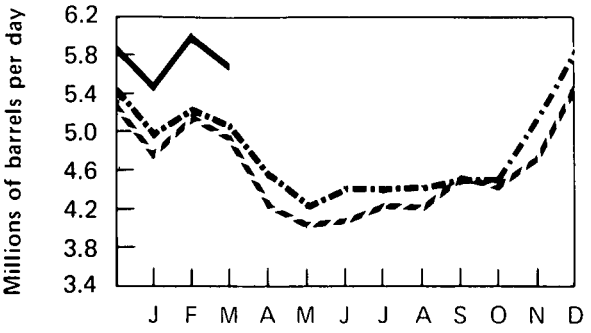
		Total IEA*	Japan**	West Germany	France***	United Kingdom	Canada	Italy†	Other IEA††
					Thousands of barrels per day				
1973	**AVG.**	**33,600**	**5,000**	**2,693**	**2,219**	**1,974**	**1,597**	**1,525**	**3,467**
1974	**AVG.**	**32,390**	**4,872**	**2,408**	**2,094**	**1,857**	**1,630**	**1,521**	**3,449**
1975	Jan	34,100	4,729	2,183	2,190	1,981	1,691	1,792	3,741
	Feb	34,100	5,191	2,455	2,243	1,907	1,872	1,767	3,825
	Mar	31,600	4,918	2,234	1,952	1,731	1,558	1,558	3,285
	Apr	31,200	4,202	2,431	2,202	1,826	1,592	1,530	3,578
	May	28,600	4,041	2,253	1,640	1,482	1,474	1,174	3,058
	June	29,300	4,135	2,106	1,642	1,416	1,550	1,289	3,195
	July	29,400	4,265	2,319	1,491	1,322	1,537	1,234	2,961
	Aug	29,200	4,234	2,360	1,300	1,208	1,444	1,105	3,082
	Sept	30,400	4,543	2,309	1,785	1,501	1,474	1,465	3,338
	Oct	31,000	4,409	2,328	1,917	1,707	1,555	1,679	2,981
	Nov	31,000	4,747	2,361	2,077	1,723	1,577	1,448	3,423
	Dec	35,100	5,447	2,502	2,658	1,821	1,880	1,600	3,863
	AVG.	**31,235**	**4,568**	**2,319**	**1,925**	**1,633**	**1,594**	**1,468**	**3,382**
1976	Jan	35,100	4,941	2,464	2,432	1,679	1,784	1,775	3,943
	Feb	34,400	5,246	2,497	2,492	1,865	1,754	1,743	3,991
	Mar	34,300	5,165	2,742	2,372	1,879	1,747	1,641	3,907
	Apr	31,500	4,526	2,332	2,117	1,716	1,518	1,423	3,457
	May	29,900	4,218	2,325	1,796	1,417	1,509	1,253	3,226
	June	31,300	4,429	2,373	1,604	1,416	1,560	1,236	3,459
	July	31,100	4,416	2,624	1,624	1,346	1,531	1,343	3,323
	Aug	31,100	4,461	2,522	1,668	1,276	1,577	1,360	3,395
	Sept	32,200	4,517	2,521	1,966	1,477	1,515	1,592	3,806
	Oct	32,300	4,523	2,391	1,908	1,544	1,560	1,464	3,780
	Nov	35,900	5,160	2,700	2,206	1,750	1,822	1,393	4,233
	Dec	39,100	5,846	2,571	2,672	1,869	2,008	1,779	4,593
	AVG.	**33,180**	**4,786**	**2,505**	**2,073**	**1,603**	**R1,658**	**1,500**	**3,758**
1977	Jan	37,372	5,428	R2,389	2,492	1,830	R1,792	R1,628	4,018
	Feb	38,239	6,023	2,441	2,372	1,844	1,919	R1,809	3,825
	Mar	34,663	5,695	R2,521	2,127	1,802	1,655	R1,546	3,664
	Apr	NA	NA	R2,406	R2,048	NA	NA	1,359	NA
	May	NA	NA	NA	1,866	NA	NA	1,252	NA
	AVG. (Year to date)	**36,709**	**5,705**	**2,439**	**2,178**	**1,825**	**R1,784**	**1,514**	**3,836**

*The 19 signatory nations of the International Energy Agency (IEA) are: Austria, Belgium, Canada, Denmark, Federal Republic of Germany, Greece, Ireland, Italy, Japan, Luxembourg, Netherlands, New Zealand, Norway, Spain, Sweden, Switzerland, Turkey, United Kingdom, and United States. Except for the United States, inland consumption excludes bunkers, refinery fuel, and losses.
**Excludes liquefied petroleum gases and condensates.
***Not a member of IEA.
†Principal products only.
††Excludes the United States.
NA=Not available.
R=Revised data.
Note: All Total IEA, Other IEA, and recent figures are estimates.
Source: Central Intelligence Agency, *International Oil Developments, Statistical Survey,* 15 June 1977, and later issues.

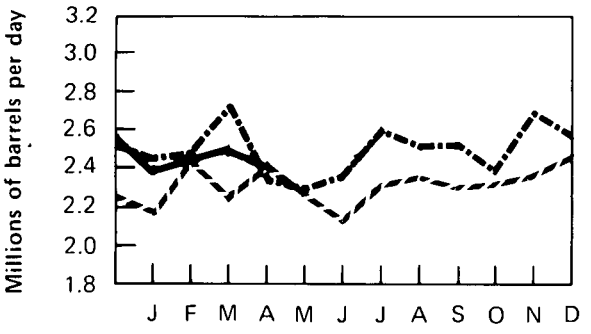
Total IEA



Japan*



West Germany



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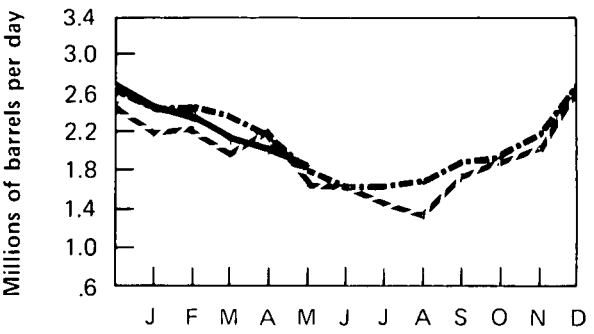
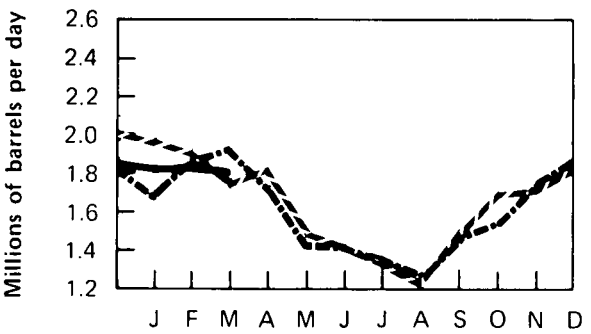
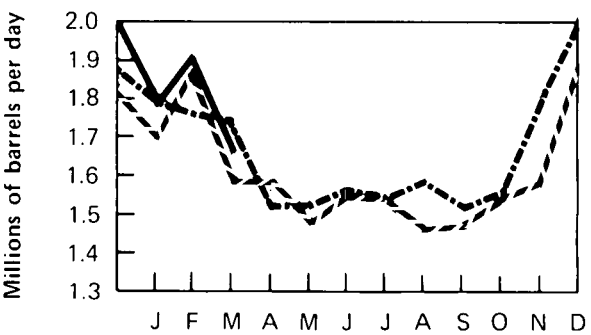


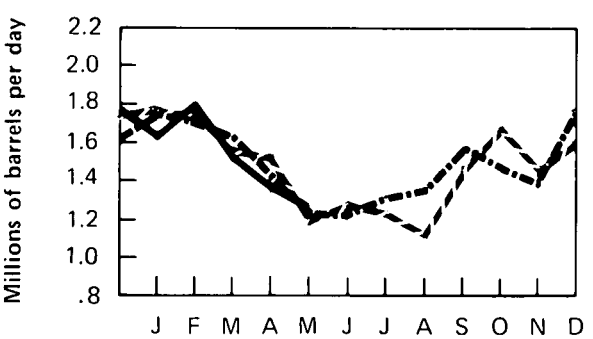
United Kingdom



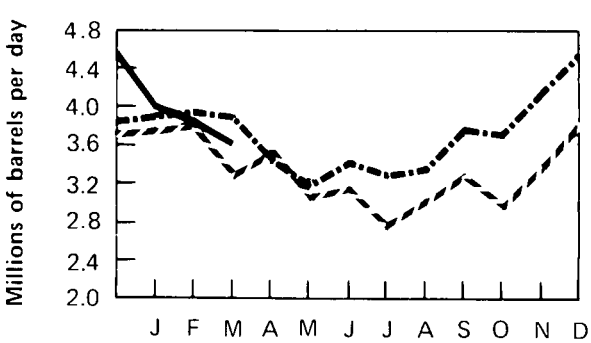
Canada



Italy***



Other IEA†



*Excludes liquefied petroleum gases and condensates.
**Not a member of IEA.
***Principal products only.
†Excludes the United States.

1975
1976
1977

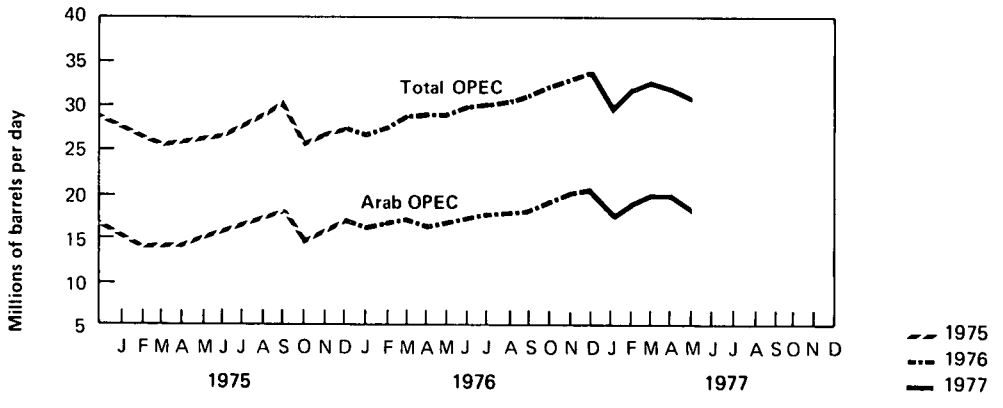
Crude Oil Production

Crude Oil Production for Major Petroleum Exporting Countries – May 1977

Country	Production						Production Capacity	Production Shut in
	1972 Year	1973 Year	1974 Year	1975 Year	1976 Year	1977 May**	May	May
	Thousands of barrels per day							Percent
Algeria	1,040	1,070	960	960	990	1,000	1,000	0
Iraq	1,465	2,020	1,970	2,260	2,280	2,200	3,000	26.7
Kuwait*	3,283	3,020	2,545	2,085	2,150	1,800	3,500	48.6
Libya	2,239	2,175	1,520	1,480	1,930	2,200	2,500	12.0
Qatar	482	570	520	440	490	390	700	44.3
Saudi Arabia*	6,016	7,595	8,480	7,075	8,580	8,600	11,500	25.2
United Arab Emirates	1,202	1,535	1,680	1,665	1,940	2,080	2,390	13.0
Subtotal: Arab OPEC	**15,727**	**17,985**	**17,675**	**15,965**	**18,360**	**18,270**	**24,590**	**25.7**
Ecuador	78	210	175	160	190	190	225	15.5
Gabon	125	150	200	225	220	220	250	12.0
Indonesia	1,080	1,340	1,375	1,305	1,500	1,740	1,800	3.3
Iran	5,023	5,860	6,020	5,350	5,880	5,740	6,700	14.3
Nigeria	1,815	2,055	2,255	1,785	2,070	2,260	2,300	1.7
Venezuela	3,219	3,365	2,975	2,345	2,290	2,200	2,600	15.4
Subtotal: Non-Arab OPEC	**11,340**	**12,980**	**13,000**	**11,170**	**12,150**	**12,350**	**13,875**	**11.0**
TOTAL OPEC	**27,067**	**30,965**	**30,675**	**27,135**	**30,510**	**30,620**	**38,465**	**20.4**
Canada	1,540	1,800	1,695	1,460	1,300	1,245	1,800	30.8
Mexico	440	465	580	720	850	990	1,000	1.0
TOTAL OPEC, Canada, Mexico	**29,047**	**33,230**	**32,950**	**29,315**	**32,660**	**32,855**	**41,265**	**20.4**
Total World	**50,550**	**55,745**	**55,865**	**52,990**	**57,170**	**58,800**		

*Includes about one-half of the former Kuwait-Saudi Arabia Neutral Zone. Production in May 1977 amounted to approximately 350,000 barrels per day.
**Estimated.
Sources: Central Intelligence Agency, *International Oil Developments, Statistical Survey,* 15 June 1977, and later issues; and National Energy Board of Canada.

OPEC Countries Crude Oil Production



Definitions

Base Production Control Level

1. Prior to February 1, 1976: the total number of barrels of domestic crude oil produced and sold from a particular property in the same month of 1972. If domestic crude oil was not produced and sold from that property in every month of 1972, the total number of barrels of domestic crude oil produced and sold from that property in 1972, divided by 12.

2. Effective February 1, 1976: the total number of barrels of old crude oil produced and sold from the property during calendar year 1975, divided by 365, and multiplied by the number of days in the particular month during 1975. A producer may elect to use the total number of barrels of crude oil produced and sold from the property during calendar year 1972, divided by 366, and multiplied by the number of days in the particular month during 1972.

Branded Independent Marketer

A firm which is engaged in the marketing or distribution of refined petroleum products pursuant to (1) an agreement or contract with a refiner (or a firm which controls, is controlled by, or is under common control with such refiner) to use a trademark, trade name, service mark, or other identifying symbol or name owned by such refiner (or any such firm), or (2) an agreement or contract under which any such firm engaged in the marketing or distribution of refined petroleum products is granted authority to occupy premises owned, leased, or in any way controlled by a refiner (or firm which controls, is controlled by, or is under common control with such refiner), but which is not affiliated with, controlled by, or under common control with any refiner (other than by means of a supply contract, or an agreement or contract described in parts (1) and (2) of this definition), and which does not control such refiner.

Ceiling Price

The maximum permissible selling price, prior to February 1, 1976, for a particular grade of domestic crude oil in a particular field is the May 15, 1973, posted price plus $1.35 per barrel.

Controlled Crude Oil

Crude oil that was domestically produced prior to February 1, 1976, subject to the ceiling price for crude oil. For a particular property which is not a stripper well lease, the volume of controlled oil equals the base production control level minus an amount of released oil equal to the new oil production from that property.

Crude Oil Domestic Production

Domestic crude oil production is measured at the wellhead and includes lease condensate, which is a natural gas liquid recovered from lease separators or field facilities.

Crude Oil Entitlement Value

The average value a refiner receives from the entitlement program for each incremental barrel of imported crude oil. It is calculated by multiplying the entitlement price by the National Old Oil Supply Ratio for November 1974 through January 1976 and by the National Domestic Crude Oil Supply Ratio for February 1976 forward.

Crude Oil Imports

The volume of crude oil imported into the 50 States and the District of Columbia, including imports from U.S. territories, but excluding imports of crude oil into the Hawaiian Foreign Trade Zone.

Crude Oil Input to Refineries

Total crude oil used as input for the refining process, less crude oil lost or used for refinery fuel.

Crude Oil Stocks

Stocks of crude oil and lease condensate held at refineries, pipeline terminals, and on leases.

Cumulative Deficiency

A measure of the cumulative deficit of production below the base production control level after the first month in which new oil was produced and sold from a specific property.

Dealer Tankwagon (DTW) Price

The price at which a dealer purchases gasoline from a distributor or a jobber.

Distillate Fuel Oil

The lighter fuel oils distilled off during the refining process. Included are products known as ASTM grades Nos. 1 and 2 heating oils, diesel fuels, and No. 4 fuel oil. The major uses of distillate fuel oils include heating, fuel for on- and off-highway diesel engines, and railroad diesel fuel. Minor quantities of distillate fuel oils produced and/or held as stocks at natural gas processing plants are not included in this series.

Domestic Demand for Refined Petroleum Products

A calculated value, computed as domestic production plus net imports (imports less exports), less the net in-

crease in primary stocks. It, therefore, represents the total disappearance of refined products from primary supplies.

Electricity Production

Production at electric utilities only. Does not include industrial electricity generation.

Entitlement Position

The monthly entitlement position of a refiner indicates whether he bought or sold entitlements in that month. An entitlement is the right to process "deemed old oil," which is the sum of a refiner's receipts of "old" oil and a fraction of his receipts of "upper tier" crude oil. This fraction is set monthly by FEA. A refiner must purchase entitlements for the amount of his "deemed old oil" receipts in excess of the national domestic crude oil supply ratio (NDCOSR). The NDCOSR, as calculated by FEA, reflects the differences in costs to refiners of "old" oil, "upper tier" crude oil, and imported crude oil.

Entitlement Price

The price of an entitlement, fixed by FEA, is the exact differential as reported for the month between the weighted average delivered cost per barrel to refiners of both imported crude oil and stripper crude oil, and the weighted average delivered cost per barrel to refiners of "old oil," less 21 cents.

Firm Natural Gas Service

High priority gas service in which the pipeline company is under contract to deliver a specified volume of gas to the customer on a non-interruptible basis. Residential and small commercial facilities usually fall into this category.

Interruptible Natural Gas Service

Low priority gas service in which the pipeline company has the contractual option to temporarily terminate deliveries to customers by reason of claim of firm service customers or higher priority users. Large commercial facilities, industrial users, and electric utilities usually fall into this category.

Jet Fuel

Includes both naphtha-type and kerosene-type fuels meeting standards for use in aircraft turbine engines. Although most jet fuel is used in aircraft, some is used for other purposes, such as for generating electricity in gas turbines.

Jobber

A petroleum distributor who purchases refined product from a refiner or terminal operator for the purpose of reselling to retail outlets and commercial accounts or for the purpose of retailing through his own retail outlets.

Jobber Margin

The difference between the price at which a jobber purchases refined product from a refiner or terminal operator and the price at which the jobber sells to retail outlets. This does not reflect margins obtained by jobbers through retail sales or commercial accounts.

Jobber Price

The price at which a petroleum jobber purchases refined product from a refiner or terminal operator.

Landed Cost

The cost of imported crude oil equal to actual cost of the crude oil at point of origin plus transportation cost to the United States.

Limited Work Authorization

A Limited Work Authorization (LWA) may be granted by the Atomic Safety and Licensing Board of the Nuclear Regulatory Commission to an applicant who wants to construct a nuclear powerplant providing that the project has been cleared for all requirements of the National Environmental Protection Act and that the geologic and topographic suitability of the reactor site has been found satisfactory. The LWA allows an applicant to proceed with site excavation, install temporary construction and service facilities, construct service roads, and erect structures and components not subject to normal quality assurance inspections. It may save a utility from 6 to 8 months in total construction time. However, because the ultimate approval of a construction permit is based on all evidence revealed during the licensing hearings, the successful award of an LWA is no guarantee that a construction permit will also be granted.

Line Miles of Seismic Exploration

The distance along the earth's surface that is covered by seismic traverses.

Lower Tier Crude Oil

Old crude oil.

Lower Tier Ceiling Price Determination

The lower tier ceiling price for a particular grade of domestic crude oil in a particular field is the sum of (1) the highest posted price at 6 a.m., local time, May 15, 1973, for transactions in that grade of crude oil in that field; or if there was no posted price in that field for that grade of domestic crude oil, the related price for that grade of domestic crude oil which is most similar in kind and

quality in the nearest field for which prices were posted; and (2) the amount mandated in the Monthly Price Adjustment Schedules published by FEA in the *Federal Energy Guidelines* (Part 212.77-13847 Appendix).

Major Brand

Lundberg Survey, Inc., defines major brand as an integrated company that produces, refines, transports, and markets in Interstate Commerce under its own brand(s) in 10 or more States.

Motor Gasoline Production

Total production of motor gasoline by refineries, measured at the refinery outlet. Relatively small quantities of motor gasoline are produced at natural gas processing plants, but these quantities are not included.

Motor Gasoline Stocks

Primary motor gasoline stocks held by gasoline producers. Stocks at natural gas processing plants are not included.

National Domestic Crude Oil Supply Ratio

Old oil receipts adjusted for upper-tier receipts, small refiner bias, and other minor adjustments, divided by crude runs to stills adjusted for residual fuel entitlements.

National Old Oil Supply Ratio

Old oil receipts, adjusted for small refiner bias and exemptions, divided by crude runs to stills adjusted for entitlements issued for imported refined products.

Natural Gas Liquids (NGL)

Products obtained from natural gasoline plants, cycling plants, and fractionators after processing the natural gas. Included are ethane, liquefied petroleum (LP) gases (propane, butane, and propane-butane mixtures), natural gasoline, plant condensate, and minor quantities of finished products such as gasoline, special naphthas, jet fuel, kerosene, and distillate fuel oil.

New Crude Oil

1. Prior to February 1, 1976: the total number of barrels of domestic crude oil produced and sold in a specific month, less the base production control for that month and less the current cumulative deficiency.

2. Effective February 1, 1976: the total number of barrels of domestic crude oil produced and sold in a specific month, less the property's base production control level for that month and less the current cumulative deficiency since February 1, 1976.

Nonbranded Independent Marketer

A firm which is engaged in the marketing or distribution of refined petroleum products, but which (1) is not a refiner, (2) is not a firm which controls, is controlled by, is under common control with, or is affiliated with a refiner (other than by means of a supply contract), and (3) is not a branded independent marketer.

Old Crude Oil

1. Prior to February 1, 1976: The total number of barrels of crude oil produced and sold from a property in a specific month, less the total number of barrels of new crude oil for that property in that month and less the total number of barrels of released crude oil for that property in that month.

2. Effective February 1, 1976: the total number of barrels of crude oil produced and sold from a property in a specific month, less the total number of barrels of new crude oil for that property in that month.

Power Ascension Nuclear Powerplant

A nuclear powerplant that has been licensed by the Nuclear Regulatory Commission to operate, but that is in the initial testing phase during which production of electricity may not be continuous. In general, when the electric utility is satisfied with the plant's performance, it formally accepts the plant from the manufacturer, and places it in "commercial operation" status. A request is then submitted to the appropriate utility rate commission to include the powerplant in the rate base calculation.

Primary Stocks of Refined Petroleum Products

Stocks held at refineries, bulk terminals, and pipelines. They do not include stocks held in secondary storage facilities, such as those held by jobbers, dealers, independent marketers, and consumers.

Property

Prior to August 26, 1976, a property was defined as the right to produce domestic crude oil, which arises from a lease or from a fee interest. This definition was interpreted to apply only to a surface lease. In August 1976 the definition of a property was changed so that a producer may treat as a separate property each separate and distinct producing reservoir subject to the same right to produce crude oil, provided that such reservoir is recognized by the appropriate governmental regulatory authority as a producing formation that is separate and distinct from, and not in communication with, any other producing formation. Although this new definition was

not implemented until August 26, 1976, it was made effective retroactively to February 1, 1976. (F.R. 36171, August 26, 1976)

Refined Petroleum Products Imports

Imports (into the 50 States and the District of Columbia) of motor gasoline, naphtha-type jet fuel, kerosene-type jet fuel, kerosene, distillate fuel oil, residual fuel oil, liquefied petroleum gases, petrochemical feedstocks, special naphtha, lubricants, waxes, asphalt, plant condensate, and unfinished oils. Included are imports of refined products for bonded and military use, and imports from U.S. territories and the Hawaiian Foreign Trade Zone.

Refiner Acquisition Cost

The cost to the refiner, including transportation and fees, of crude petroleum. The composite cost is the average of domestic and imported crude costs and represents the amount of crude cost which refiners may pass on to their customers.

Released Crude Oil

An amount of crude oil produced from a property in a particular month prior to February 1, 1976, which is equal to the total number of barrels of new crude oil produced and sold from that property in that month. The amount of released crude oil for a property in a particular month shall not exceed the base production control level for that property in that month.

Residual Fuel Oil

The heavier oils that remain after the distillate fuel oils and lighter hydrocarbons are boiled off in refinery operations. Included are products known as ASTM grades Nos. 5 and 6 oil, heavy diesel oil, Navy Special Oil, Bunker C oil, and acid sludge and pitch used as refinery fuels. Residual fuel oil is used for the production of electric power, for heating, and for various industrial purposes.

Rotary Rig

Machine used for drilling wells that employs a rotating tube attached to a bit for boring holes through rock.

Separative Work Unit (SWU)

The measure of work required to produce enriched uranium from natural uranium. Enrichment plants separate natural uranium feed material into two groups, an enriched product group with a higher percentage of U-235 than the feed material and a depleted tails group with a lower percentage of U-235 than the feed material. To produce 1 kilogram of enriched uranium containing 2.8 percent U-235, and a depleted tails assay containing 0.3 percent U-235, it requires 6 kilograms of natural uranium feed and 3 kilograms of separative work units (3 SWU).

Stripper Well Property

A property whose average daily production of crude oil per well (excluding condensate recovered in nonassociated production) did not exceed 10 barrels per day during any preceding consecutive 12-month period beginning after December 31, 1972.

Synthetic Natural Gas (SNG)

A product resulting from the manufacture, conversion, or reforming of petroleum hydrocarbons which may be easily substituted for or interchanged with pipeline quality natural gas.

Uncontrolled Crude Oil

That portion of domestic crude oil production including new, released, and stripper oil which, before February 1, 1976, could be sold at a price exceeding the ceiling price.

Unrecouped Costs

Costs which have not been recovered in the current month's product prices but which have been "banked" for later use.

Upper Tier Crude Oil

Effective February 1, 1976, upper tier crude oil included new crude oil and crude oil produced from a stripper well lease. Effective September 1, 1976, upper tier crude oil includes new crude oil only.

Upper Tier Ceiling Price Determination

The upper tier ceiling price for a particular grade of domestic crude oil in a particular field is (1) the highest posted price on September 30, 1975, for transactions in that grade of crude oil in that field in September 1975, or if there was no posted price in that field for that grade of domestic crude oil, the related price for that grade of domestic crude oil which is most similar in kind and quality in the nearest field for which prices were posted; less (2) the amount mandated in the Monthly Price Adjustment Schedules published by FEA in the *Federal Energy Guidelines* (Part 212.77 .13847 Appendix).

Well

A hole drilled for the purpose of finding or producing crude oil or natural gas or providing services related to the production of crude oil or natural gas. Wells are classified as oil wells, gas wells, dry holes, stratigraphic tests, or service wells. This is a standard definition of the American Petroleum Institute.

Explanatory Notes

1. Domestic production of energy includes production of crude oil and lease condensate, natural gas (wet), and coal (anthracite, bituminous, and lignite), as well as electricity output from hydroelectric and nuclear powerplants and industrial hydroelectric power production. The volumetric data were converted to approximate heat contents (Btu-values) of the various energy sources using conversion factors listed in the Units of Measure.

2. U.S. imports of fossil fuels include imports of crude oil, refined petroleum products, and natural gas (dry).

3. Domestic consumption of energy includes domestic demand for refined petroleum products, consumption of coal (anthracite, bituminous, and lignite) and natural gas (dry), electricity output from hydroelectric and nuclear powerplants, industrial hydroelectric power production, and net imports of electric power. Approximate heat contents (Btu-values) were derived using conversion factors listed in the Units of Measure. Electricity imports were converted using the Btu-content of hydroelectric power. 1976 and 1977 electricity imports were estimated on the basis of the import level for 1975.

4. Domestic demand figures for natural gas liquids (NGL) as reported by BOM and reproduced in this publication do not include amounts utilized by refineries for blending purposes in the production of finished products, principally gasoline. Use of NGL at refineries is reported in a separate column. The production series cited in this publication shows both NGL produced at processing plants and liquefied gases produced at refineries. (LRG). NGL produced at refineries is extracted from crude oil and hence, to avoid double counting, should not be included in calculations of total U.S. production of petroleum liquids. The stock series shown in this volume includes natural gas liquids held as stocks at both natural gas processing plants and at refineries and LRG held at refineries.

5. The petroleum short-term demand forecasting model uses historical consumption data to construct regression equations for each of eight major petroleum products on a regional level. Each equation attempts to capture the relationship between final demand for that product and the factors influencing that demand. The explanatory factors used in predicting product demand include (1) macroeconomic variables such as real adjusted gross income, (2) real product prices, (3) variables representing the effects of weather and other seasonal variations in demand, and (4) other factors relevant to a particular product.

Assumptions underlying the current short-term forecast are: normal weather and a level of economic activity producing real GNP growth rates of 5.8, 5.4, and 5.1 percent for 1977, 1978, and 1979, respectively.

The supply model includes an assumed level of domestic crude oil and NGL production and inventory changes. Imports are determined as the incremental supply required to meet total demand for refined products not satisfied by domestic production or inventory drawdown.

6. Domestic consumption of natural gas includes the quantities sold to consumers plus the gas used for plant and pipeline fuel, after the natural gas liquids have been extracted. All monthly consumption data are estimated. Marketed production of natural gas includes gross withdrawals from the ground less the quantities used for repressuring and the amount vented and flared, before the natural gas liquids have been extracted.

7. The Federal Energy Administration and Federal Power Commission began the coordinated collection and compilation of monthly underground storage information from all underground storage operators in the United States in October 1975. Initial storage information reported was for the month of September 1975. Comparable monthly information for total U.S. storage operations is not available for prior periods.

The total gas in storage is the total volume of gas (base gas plus working gas) in storage reservoirs as of the end of the month. Base gas is the volume of gas, including all native gas in place at the time of conversion to storage, needed as a permanent inventory to maintain adequate reservoir pressures and deliverability rates throughout the withdrawal season. Base gas includes the volumes which will not be recoverable upon termination of storage operations. Working gas is the volume of gas above the designated base gas level available for withdrawal.

8. Bituminous coal and lignite consumption as reported by the Bureau of Mines are derived for information provided by the Federal Power Commission, Department of Commerce, and reports from selected manufacturing industries and retailers. Domestic consumption data in this series, therefore, approximate actual consumption. This is in contrast to domestic demand reported for petroleum products, which is a calculated value representing total disappearance from primary supplies.

Bituminous coal and lignite production is calculated from the number of railroad cars loaded at mines, based on the assumption that approximately 60 percent of the coal produced is transported by rail. Production data are estimated by the Bureau of Mines from Association of American Railroads reports of carloadings.

9. Cooling degree-days can be used as a measurement of energy consumption by air-conditioning systems. Cooling degree-days are defined as deviations of the mean daily temperature at a sampling station above a base temperature equal to 65° F by convention. Mean daily temperature information is forwarded to the National Oceanic and Atmospheric Administration from approximately 200 weather stations around the country. These data are used to calculate statewide cooling degree-day averages based on the population of the area surrounding each weather station. The population-weighted State figures are aggregated into Petroleum Administration for Defense Districts and the national average, also using a population weighting scheme.

10. Quantities of uranium are measured by various units at different stages in the fuel cycle. At the mill, quantities are usually expressed as pounds or short tons of U_3O_8. After the conversion stage, the units of measure are either metric tons (MT) of F_6 or metric tons of uranium (MTU). The later designation expresses only the Units of Measure section.

Following the enrichment stage, the same units are used, but the U-235 content has been enhanced at the expense of loss of material. At the fabrication stage, UF_6 is changed to UO_2, and the standard unit of measure is the MTU. We have chosen to present all uranium quantities as MTU; conversion factors to other units are given in the section of Units of Measure.

11. The units used to describe power generation at nuclear plants are based on the watt, which is a unit of power. (Power is energy produced per unit of time.) As with fossil-fueled plants, nuclear plants have three design power ratings. The thermal rating (expressed in thermal megawatts) is the rate of heat production by the reactor core. The gross electrical rating (expressed in electrical megawatts, MWe) is the generator capacity at the stated thermal rating of the plant. The net electrical rating (also expressed in MWe) is the power available as input to the electrical grid after subtracting the power needed to operate the plant. (A typical nuclear plant needs 5 percent of its generated electricity for its own operation.)

The electrical energy produced by a plant is expressed either as megawatt hours (MWhe) or kilowatt hours (KWhe). Tables in the nuclear section show generated electricity as average electrical power. This enables a more direct comparison to design capacity and to previous months' performances. To obtain the quantity of electricity generated during a given time period (in kilowatt hours), multiply the average power level (in kilowatts) by the number of hours during that period.

The energy extracted from uranium fuel is expressed as thermal megawatt days per metric ton of uranium (MWD/MTU). The production of plutonium in the fuel rods is expressed as kilograms of plutonium per metric ton of discharged uranium (kg/MTU).

12. The Residential and Commercial Sector consists of housing units, non-manufacturing business establishments (e.g., wholesale and retail businesses), health and educational institutions, and government office buildings. The Industrial Sector is made up of construction, manufacturing, agriculture, and mining establishments. The Transportation Sector consists of both private and public passenger and freight transportation, as well as government transportation, including military operations. The Electric Utilities Sector is made up of privately- and publicly-owned establishments which generate electricity primarily for resale.

13. Prior to January 1975, diesel fuel prices were obtained from retail gasoline dealers that also sold diesel fuel. Beginning in January 1975, the diesel fuel survey was expanded to include selected truckstops plus additional retail gasoline dealers that sold diesel fuel. Selling price estimates are based on a survey of 31 cities. Margins are based on a survey of 10 cities.

14. Prior to February 1976, the domestic crude petroleum wellhead price represented an estimate of the average of posted prices; after February 1976, the wellhead price represents an average of first sale prices. For the 2-year period January 1974 through January 1976, the old oil price at the wellhead was originally estimated to be $5.25 per barrel based on representative postings. This estimate was revised in July 1976 after a survey of crude oil purchasers was implemented and more complete data became available. Estimates of the average old oil price given in the table for months prior to February 1976 are based on prices for old oil reported on new oil leases, and were not derived from a statistically valid sample of old oil leases.

15. The refiner acquisition cost of domestic crude petroleum is the price paid by refiners for domestic crude petroleum, unfinished oils, and natural gas liquids and includes transportation costs from the wellhead to the refinery. The refiner acquisition cost of imported crude petroleum is the average landed cost of imported crude petroleum to the refiner and represents the amount which may be passed on to the consumer. It incorporates transportation costs and fees (including the supplemental import fees) and any other costs incurred in purchasing and shipping crude oil to the United States.

16. The estimated landed cost of imported crude petroleum from selected countries does not represent the total cost of all imported crude. Prior to March 1975, imported crude costs to U.S. company-owned refineries in the Caribbean were not included in the landed cost,

and costs of crude petroleum from countries which export only small amounts to the United States were also excluded. Beginning in March 1975, however, coverage was expanded to include U.S. company-owned refineries in the Caribbean. Landed costs do not include supplemental fees.

17. The weighted average utility fuel cost for the total United States include distillate fuel oil delivered to utilities whereas the regional breakdown for residual fuel oil prices represents only No. 6 fuel oil prices.

Units of Measure

Weight

1 metric ton	*contains*	1.102 short tons
1 long ton	*contains*	1.120 short tons

Conversion Factors for Crude Oil

Average gravity

1 barrel	*contains*	42 gallons
1 barrel	*weighs*	0.136 metric tons (0.150 short tons)
1 metric ton	*contains*	7.33 barrels
1 short ton	*contains*	6.65 barrels

Conversion Factors for Uranium

1 short ton (U_3O_8)	*contains*	0.769 metric tons of uranium
1 short ton (UF_6)	*contains*	0.613 metric tons of uranium
1 metric ton (UF_6)	*contains*	0.676 metric tons of uranium

Approximate Heat Content of Various Fuels

Petroleum	
Crude Oil	5.800 million Btu/barrel
Refined products	
Imports, average	6.000 million Btu/barrel
Consumption, average	5.4959 million Btu/barrel
Gasoline	5.248 million Btu/barrel
Jet Fuel, average	5.604 million Btu/barrel
Naphtha-type	5.355 million Btu/barrel
Kerosene-type	5.670 million Btu/barrel
Distillate fuel oil	5.825 million Btu/barrel
Residual fuel oil	6.287 million Btu/barrel
Natural gas liquids	4.023 million Btu/barrel
Natural gas	
Wet	1,095 Btu/cubic foot
Dry	1,021 Btu/cubic foot
Coal	
Bituminous and lignite	
Production	23.50 million Btu/short ton
Consumption	22.80 million Btu/short ton
Anthracite	25.40 million Btu/short ton

Electricity Conversion Heat Rates

Fossil fuel steam-electric	
Coal	10,280 Btu/kilowatt hour
Gas	10,784 Btu/kilowatt hour
Oil	10,804 Btu/kilowatt hour
Nuclear steam-electric	10,660 Btu/kilowatt hour
Hydroelectric	10,383 Btu/kilowatt hour
Electricity Consumption	3,412 Btu/kilowatt hour

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